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(54) Title: SECRETED EXPRESSED SEQUENCE TAGS (sESTs)

(57) Abstract

Secreted expressed sequence tags (sESTs) isolated from a variety of human tissue sources are provided.

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EE	Estonia						

SECRETED EXPRESSED SEQUENCE TAGS (sESTs)

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FIELD OF THE INVENTION

The present invention provides novel polynucleotides which are expressed sequence tags (ESTs) for secreted proteins.

BACKGROUND OF THE INVENTION

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Gargantuan efforts have been employed by various investigational projects to randomly sequence portions of naturally-occurring cDNAs. The rationale behind this approach to identification and sequencing genes is founded in two basic principles: (1) that transcribed cDNAs represent the product of the most important genes, namely those that are actually expressed *in vivo*, and (2) that efforts to sequence genes and other portions of the genome of target organisms which are not actually expressed wastes substantial effort on areas not likely to yield genetic information of therapeutic importance. Thus, the high-throughput sequencing efforts focus on only those portions of the genome which are expressed. The randomly produced cDNA sequences represent "expressed sequence tags" or "ESTs", which identify and can be used as probes for the longer, full-length cDNA or genomic sequence from which they were transcribed.

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Although this "shortcut" approach to genomic sequencing presents savings of effort compared to sequencing of the complete genome, it still produced a vast array of ESTs which may not be directly useful as protein therapeutics. To date, the majority of protein-related drug discovery has focused on the use of secreted proteins to produce a desired therapeutic effect. Since the EST approach theoretically identifies all expressed proteins, it produces an EST library which contains a mixture of secreted proteins (such as hormones, cytokines and receptors) and non-secreted proteins (such as, for example, metabolic enzymes and cellular structural proteins), without identifying which ESTs correspond to proteins falling into either category. As a result, these methods are not optimally tailored to the needs of investigators searching for secreted proteins because they must separate the secreted "wheat" from the non-secreted "chaff", wasting effort and resources in the process.

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Co-assigned U.S. Patent No. 5,536,637, which is incorporated herein by reference, provides methods for focusing genomic sequencing efforts on sequences encoding the secreted proteins which are of most interest for identification of protein therapeutics. The '637 patent discloses a "signal sequence trap" which selectively identifies ESTs for secreted

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proteins, namely "secreted expressed sequence tags" or "sESTs". It is to these sESTs that the present invention is directed.

SUMMARY OF THE INVENTION

5 The present invention provides for sESTs isolated from a variety of human RNA/cDNA sources.

In preferred embodiments, the present invention provides an isolated polynucleotide comprising a nucleotide sequence selected from the group consisting of:

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or a complement of said sequence.

In other embodiments, the present invention provides an isolated polynucleotide consisting of a nucleotide sequence selected from the group consisting of:

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or a complement of said sequence.

In further embodiments, the present invention provides an isolated polynucleotide consisting essentially of a nucleotide sequence selected from the group consisting of:

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or a complement of said sequence.

In yet other embodiments, the present invention provides an isolated polynucleotide comprising a nucleotide sequence which hybridizes to a sequence selected from the group consisting of:

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 NO:1517, SEQ ID NO:1518, and SEQ ID NO:1519;
 25 or to a complement of said sequence.

The invention also provides for proteins encoded by the above-described polynucleotides.

DETAILED DESCRIPTION

30 The nucleotide sequences of the sESTs of the present invention are reported in the Sequence Listing below. Table 2 lists the "Clone ID Nos." assigned by applicants to each SEQ ID NO: in the Sequence Listing.

Table 2

Each pair of entries in this table consists of the SEQ ID NO (e.g., 1, 2, etc.) followed by the Clone ID No. for such sequence (e.g., B11, B18, etc.).

	1	BK8	32		62	DY307	93	DY611
5	2	BV216	DW1001		63	DY643	94	EC259
	3	BV274	33	DW831	64	DY656	95	DY711
	4	BV48	34	DW859	65	DY675	96	EC248
	5	DN351	35	DW875	66	DY988	97	EC32
	6	DN381	36	DW888	67	DY992	98	DO703
10	7	DN405	37	DW901	68	DY225	99	DO713
	8	DU651	38	DW902	69	DY236	100	DR294
	9	DU660	39	DW904	70	DY242	101	DY1
	10	DU675	40	DW905	71	DY254	102	DY10
	11	DU684	41	DW906	72	DY914	103	DY106
15	12	DD364	42	DW929	73	DY946	104	DY117
	13	DD379	43	DW981	74	DY955	105	DY148
	14	DD389	44	DX191	75	DY959	106	DY167
	15	DD401	45	DX219	76	DY961	107	DY17
	16	DD413	46	DX245	77	DY981	108	DY174
20	17	DD426	47	DX256	78	DY357	109	DY175
	18	DD428	48	DX267	79	DY358	110	DY178
	19	DN293	49	DX66	80	DY381	111	DY23
	20	DD454	50	DX81	81	DY413	112	DY27
	21	DD472	51	DY780	82	DY414	113	DY41
25	22	DD475	52	DY803	83	DY415	114	DY42
	23	DT306	53	DY809	84	DY431	115	DY8
	24	DW282	54	DY814	85	DY433	116	DY93
	25	DW300	55	DY261	86	DY436	117	EB107
	26	DW303	56	DY264	87	DY543	118	EB113
30	27	DW323	57	DY266	88	DY565	119	EB163
	28	DT258	58	DY271	89	DY585	120	EB25
	29	DW246	59	DY287	90	DY331	121	EB77
	30	DW324	60	DY297	91	DY586	122	EC172
	31	DW333	61	DY306	92	DY696	123	EC302

	124	EC317	158	EJ90	192	EJ224	226	EP378
	125	EC328	159	EM270	193	EJ240	227	EP38
	126	EC341	160	EM278	194	EJ254	228	EO109
	127	EC349	161	EN186	195	EJ258	229	EO120
5	128	ED105	162	EN215	196	EJ265	230	EQ166
	129	ED21	163	EN217	197	EJ280	231	EQ187
	130	ED23	164	EN234	198	EJ285	232	EQ188
	131	ED30	165	EN239	199	EJ307	233	EQ190
	132	ED43	166	EN256	200	EJ38	234	EQ194
10	133	ED54	167	EN260	201	DO235	235	EQ207
	134	EE177	168	EN264	202	DO238	236	EQ208
	135	EE65	169	EN266	203	DO263	237	EQ214
	136	DQ365	170	EN271	204	DO319	238	EQ215
	137	DK393	171	EN274	205	EJ324	239	EQ218
15	138	DK399	172	EN287	206	EN470	240	EQ219
	139	DO1128	173	EN310	207	EN477	241	EQ220
	140	DO1150	174	EN342	208	EN539	242	EQ221
	141	DZ34	175	EN363	209	EP451	243	EQ226
	142	DZ42	176	EN423	210	EO10	244	EQ229
20	143	EE116	177	EH106	211	EO14	245	EQ230
	144	EE93	178	EH145	212	EO48	246	EQ231
	145	DJ387	179	EH166	213	EO58	247	EQ233
	146	DJ402	180	EH167	214	EO60	248	EQ237
	147	DN551	181	EH178	215	EO62	249	EQ261
25	148	DN559	182	EH180	216	EO68	250	EQ272
	149	DN603	183	EH186	217	EO89	251	ER104
	150	DN629	184	EH188	218	EO90	252	ER106
	151	DN631	185	EH189	219	EO92	253	ER128
	152	DO11	186	EH190	220	EO97	254	ER134
30	153	DO118	187	EH203	221	EP108	255	ER174
	154	DO15	188	EH206	222	EP165	256	ER201
	155	DO157	189	EH95	223	EP219	257	ER77
	156	DO19	190	EJ148	224	EP234	258	ER80
	157	EJ53	191	EJ179	225	EP277	259	ER97

	260	ES136	294	ER399	328	FB264	362	FG208
	261	ES306	295	ER408	329	FB38	363	FG265
	262	ES35	296	ER418	330	FB71	364	FG274
	263	ES37	297	ER430	331	FB78	365	FG278
5	264	ES206	298	ER471	332	FC12	366	FG281
	265	ET13	299	ER476	333	FB349	367	FG291
	266	ET22	300	ER493	334	FC136	368	FG294
	267	ET39	301	ER496	335	FC170	369	FG340
	268	ET84	302	ER498	336	FD152	370	FG363
10	269	EF121	303	ER524	337	FE141	371	FG372
	270	EF129	304	EW13	338	FE5	372	FG380
	271	EF45	305	EX25	339	FD131	373	FG401
	272	EF48	306	EX53	340	EC425	374	FG99
	273	EF5	307	EY165	341	EC428	375	FI203
15	274	EF88	308	EY29	342	ED204	376	FE311
	275	EG194	309	EZ35	343	ED205	377	FE315
	276	EG251	310	EZ4	344	ED210	378	FE322
	277	EH12	311	EZ88	345	ED223	379	FE329
	278	EH213	312	EZ93	346	DI301	380	FE341
20	279	EH22	313	FA8	347	DI303	381	FE366
	280	EH221	314	EV234	348	DI310	382	FE375
	281	EH248	315	EW101	349	DI39	383	FE412
	282	EH29	316	EW109	350	DJ90	384	FE415
	283	EH61	317	EW150	351	DM290	385	FE442
25	284	EH68	318	EY197	352	DM304	386	FE472
	285	EH78	319	EY206	353	DN618	387	FE557
	286	EH80	320	EY215	354	DN896	388	FE568
	287	ER311	321	EZ209	355	DN904	389	FE619
	288	ER329	322	FA139	356	FG119	390	FE676
30	289	ER343	323	FA171	357	FG126	391	FE682
	290	ER366	324	FA252	358	FG140	392	FF150
	291	ER369	325	FA28	359	FG193	393	FF153
	292	ER381	326	FA316	360	FG197	394	FF168
	293	ER395	327	FA95	361	FG198	395	FF175

	396	FF181	430	FH17	464	FN203	498	FO201
	397	FF46	431	FH170	465	FN228	499	FO209
	398	FF49	432	FH24	466	FN229	500	FO211
	399	FF97	433	FH3	467	FN251	501	FO215
5	400	FG41	434	FH39	468	FN254	502	FO253
	401	FG437	435	FH56	469	FP134	503	FO254
	402	FG441	436	FH6	470	FP14	504	FO261
	403	FG448	437	FH66	471	FP163	505	FO267
	404	FG45	438	FM109	472	FP172	506	FO275
10	405	FG492	439	FM13	473	FP71	507	FO290
	406	FG504	440	FM15	474	FP87	508	FO292
	407	FG565	441	FM150	475	EI118	509	FO316
	408	FG567	442	FM170	476	EI16	510	FO324
	409	FG57	443	FM28	477	EI187	511	FO327
15	410	FG577	444	FM3	478	EI203	512	FO348
	411	FG615	445	FM32	479	EI228	513	FO36
	412	FG625	446	FM36	480	EI231	514	FO38
	413	FG630	447	FM60	481	EI236	515	FO40
	414	FG659	448	FM86	482	EI239	516	FO66
20	415	FG708	449	FM95	483	EI243	517	FO75
	416	FG91	450	FM98	484	EI250	518	FP185
	417	FG884	451	FM99	485	EI255	519	FP193
	418	FG891	452	FN172	486	EI264	520	FP233
	419	FG909	453	FN19	487	EI273	521	FP239
25	420	FG912	454	FN29	488	FO11	522	FP246
	421	FG949	455	FN53	489	FO125	523	FP262
	422	FG952	456	FK199	490	FO128	524	FP268
	423	FG965	457	FK217	491	FO133	525	FP271
	424	FH10	458	FK23	492	FO135	526	FP273
30	425	FH116	459	FK32	493	FO147	527	FQ505
	426	FH123	460	FK59	494	FO152	528	DN647
	427	FH13	461	FK78	495	FO160	529	DN650
	428	FH136	462	FN189	496	FO173	530	DN676
	429	FH149	463	FN191	497	FO182	531	DO94

	532	FR292	566	DN827	600	FY201	634	DU4
	533	FR436	567	DN833	601	FY202	635	DU75
	534	FR451	568	DN834	602	FY243	636	FY386
	535	FR473	569	DN850	603	FY265	637	FY388
5	536	FS10	570	DO913	604	FY316	638	FY398
	537	FS106	571	DO923	605	FY318	639	FY414
	538	FS107	572	DO935	606	FY321	640	GA48
	539	FS143	573	DO938	607	FY354	641	GA63
	540	FS173	574	DO944	608	FY356	642	GA64
10	541	FS28	575	DO949	609	FY421	643	DT382
	542	FS31	576	DO952	610	FY430	644	DT385
	543	FS40	577	DQ12	611	FY455	645	DT388
	544	FV35	578	DT2	612	FY484	646	DT464
	545	FV49	579	DT44	613	FY524	647	DT470
15	546	FV68	580	DT53	614	FY530	648	DT478
	547	FW13	581	DT8	615	FY628	649	DT482
	548	FW64	582	FQ661	616	DQ242	650	DU114
	549	FY127	583	FQ672	617	DQ262	651	DU118
	550	FY136	584	FQ696	618	DQ276	652	DU123
20	551	FY60	585	FR1087	619	DQ285	653	DU133
	552	FY65	586	FR927	620	DQ304	654	DU156
	553	FY72	587	FR938	621	DQ313	655	DU157
	554	DN1112	588	FR980	622	DQ51	656	FZ5
	555	DN1118	589	FV122	623	DQ54	657	FZ87
25	556	DN1122	590	FV131	624	DR628	658	DW181
	557	DN782	591	FV132	625	GU215	659	DW309
	558	DN793	592	FV84	626	FM481	660	DX1
	559	DN795	593	FV85	627	DT117	661	DX15
	560	DN806	594	FV95	628	DT133	662	DX19
30	561	DN809	595	FX115	629	DT139	663	DX22
	562	DN810	596	FX127	630	DT164	664	DX29
	563	DN814	597	FX154	631	DU160	665	DX3
	564	DN815	598	FY187	632	DU164	666	DX4
	565	DN823	599	FY199	633	DU166	667	FZ428

	668	FZ163	702	FZ209	736	GE89	770	GF151
	669	DY474	703	FZ254	737	DY516	771	GF179
	670	FZ139	704	FZ346	738	DY529	772	GF99
	671	FX76	705	GA82	739	DY530	773	GB261
5	672	FX65	706	GA85	740	DY538	774	GC499
	673	FX55	707	GA91	741	DY830	775	GD177
	674	DU536	708	DX299	742	DY857	776	GD7
	675	FZ534	709	DX304	743	EA17	777	GE300
	676	DU515	710	DX309	744	EA36	778	DX179
10	677	DU475	711	DX316	745	GG73	779	DY757
	678	DU462	712	DX328	746	DU544	780	EC392
	679	DU353	713	DX336	747	DU560	781	EE15
	680	DU341	714	DX354	748	DZ109	782	DU408
	681	DU306	715	DX357	749	EA105	783	DU410
15	682	DU278	716	DX359	750	EA106	784	DU416
	683	DU244	717	DX363	751	EA110	785	DU447
	684	DU238	718	DX364	752	EA123	786	DX111
	685	DU236	719	DY478	753	EA46	787	DX112
	686	DU231	720	DY497	754	EA58	788	DX123
20	687	FZ639	721	DY508	755	EA7	789	DX138
	688	GC456	722	EA89	756	EA82	790	DX146
	689	GG126	723	EA9	757	GE361	791	DX153
	690	GG129	724	EA90	758	FZ510	792	DX157
	691	GG152	725	GC52	759	GE387	793	EE4
25	692	GG170	726	GC57	760	GE410	794	FZ676
	693	GG182	727	GC585	761	GE463	795	FZ683
	694	GG217	728	GC74	762	GE466	796	GD309
	695	GG440	729	GE28	763	GE468	797	GD358
	696	GG619	730	GE41	764	GE471	798	GG543
30	697	DX279	731	GE51	765	GE524	799	FX516
	698	DX288	732	GE60	766	GE539	800	FX536
	699	DX290	733	GE68	767	GE548	801	FZ1032
	700	DX295	734	GE80	768	GE549	802	FZ1041
	701	DX298	735	GE82	769	GE99	803	FZ1072

	804	FZ781	838	DD12	872	GP304	906	EM40
	805	GA147	839	DD127	873	GP329	907	EM42
	806	GA284	840	DD177	874	GP338	908	EM58
	807	DY723	841	DD204	875	GP340	909	GF185
5	808	DY737	842	DD207	876	GQ13	910	GF187
	809	DY739	843	DD211	877	GQ18	911	GF196
	810	EC399	844	DD217	878	GQ22	912	GF197
	811	EM254	845	DD504	879	GQ38	913	GF207
	812	FX194	846	DD509	880	GQ40	914	GF209
10	813	FX234	847	DD518	881	GQ56	915	GF212
	814	FX281	848	DD537	882	GQ6	916	GF218
	815	FX317	849	DD541	883	DD312	917	GF221
	816	FX353	850	DD71	884	DD352	918	GF222
	817	FX395	851	DH941	885	EK145	919	GF250
15	818	GA293	852	DQ194	886	EK208	920	GF255
	819	GA321	853	DQ204	887	EK223	921	GF256
	820	GA327	854	DQ215	888	EK234	922	GI28
	821	GB160	855	DQ216	889	EK480	923	GI3
	822	GA132	856	EK423	890	EK491	924	GI30
20	823	GA135	857	EK424	891	EK499	925	GI51
	824	GA205	858	EK450	892	EK571	926	GI63
	825	GB814	859	EL15	893	EK578	927	GI7
	826	GF87	860	DD285	894	EK581	928	GI74
	827	GG687	861	EK598	895	EK591	929	GI88
25	828	GG692	862	EK622	896	DD215	930	GI9
	829	GG694	863	EK626	897	EK634	931	DY874
	830	GG702	864	EK649	898	EL358	932	DY886
	831	GG705	865	GO653	899	EL360	933	DY900
	832	GP23	866	GP107	900	EL387	934	EM358
30	833	GP56	867	GP123	901	EL391	935	EM381
	834	GP61	868	GP168	902	EM111	936	EM386
	835	GP65	869	GP232	903	EM112	937	EM388
	836	DD115	870	GP274	904	EM12	938	EM396
	837	DD119	871	GP297	905	EM125	939	EM397

	940	EM401	974	GT43	1008	HU212	1042	EY290
	941	EM406	975	GT6	1009	HU141	1043	EY304
	942	EM408	976	HR712	1010	HS555	1044	EY313
	943	EM409	977	HR704	1011	HR95	1045	FK295
5	944	EM423	978	HR693	1012	HR906	1046	FK301
	945	EM424	979	HR628	1013	HR76	1047	FK317
	946	FE196	980	HR605	1014	HR753	1048	FK328
	947	FE204	981	EK341	1015	HR731	1049	FK349
	948	FE205	982	EK390	1016	EN116	1050	FK350
10	949	FE207	983	EN108	1017	EM341	1051	FK354
	950	FE215	984	FK235	1018	FJ283	1052	FK365
	951	FE222	985	GK428	1019	FJ307	1053	FQ105
	952	FE227	986	GT56	1020	FJ70	1054	FQ239
	953	FE228	987	FQ562	1021	FM176	1055	FQ360
15	954	FE248	988	FQ605	1022	FM197	1056	FQ45
	955	FE263	989	FQ608	1023	FM205	1057	GU353
	956	FE271	990	FQ609	1024	FM208	1058	GX167
	957	GF296	991	FQ612	1025	FM229	1059	GX183
	958	GN38	992	FS49	1026	FQ419	1060	GX208
20	959	GN45	993	FS87	1027	GX48	1061	GX210
	960	GN60	994	GM101	1028	GX5	1062	FM369
	961	GN68	995	GM103	1029	GX92	1063	FM375
	962	GN82	996	GM114	1030	FM289	1064	FM389
	963	GR286	997	GM129	1031	FM290	1065	FM432
25	964	EN10	998	GM153	1032	FM296	1066	FM459
	965	EN37	999	GM158	1033	FM300	1067	FM462
	966	FK127	1000	GM196	1034	FM312	1068	FM479
	967	FK151	1001	GM243	1035	GU512	1069	GX301
	968	GS26	1002	GM259	1036	GU534	1070	GX336
30	969	GS4	1003	GM266	1037	GU608	1071	GX354
	970	EV391	1004	HV38	1038	GX159	1072	GX361
	971	FG535	1005	HV23	1039	GX97	1073	GX403
	972	FG852	1006	HV199	1040	EW304	1074	GX408
	973	GT28	1007	HV181	1041	EY281	1075	GX418

	1076	GU830	1110	GG3	1144	GN97	1178	HE91
	1077	GU925	1111	HA510	1145	HB443	1179	HF289
	1078	GU940	1112	HA422	1146	HC324	1180	HG444
	1079	GX1031	1113	HA382	1147	HC327	1181	HF137
5	1080	GX496	1114	HA360	1148	HC505	1182	HD706
	1081	GX504	1115	HA249	1149	HC724	1183	HG710
	1082	GX509	1116	HA199	1150	HA1054	1184	HG733
	1083	GX536	1117	HA192	1151	HB1041	1185	HG775
	1084	GX540	1118	GZ568	1152	HB746	1186	HI222
10	1085	GX645	1119	GY520	1153	HB752	1187	HI39
	1086	GX700	1120	GY515	1154	HB975	1188	HH215
	1087	GX730	1121	GY330	1155	HC705	1189	HH357
	1088	GX750	1122	GY307	1156	HA791	1190	HH372
	1089	GX753	1123	HA81	1157	HC1002	1191	HH378
15	1090	GX760	1124	HA73	1158	HC1071	1192	HH390
	1091	GX814	1125	HA29	1159	HC1089	1193	HH396
	1092	GX851	1126	HA24	1160	HC831	1194	HH404
	1093	GX909	1127	HA18	1161	HC986	1195	HH433
	1094	GY102	1128	GZ78	1162	GY72	1196	HI2
20	1095	GY105	1129	GZ70	1163	HG159	1197	HH544
	1096	GY138	1130	GZ7	1164	HG620	1198	HH608
	1097	GY211	1131	GZ496	1165	HD161	1199	HH612
	1098	GX1082	1132	GZ495	1166	HD353	1200	HH625
	1099	GX1108	1133	GZ485	1167	HD378	1201	HH640
25	1100	GX1140	1134	GZ436	1168	HD417	1202	HH648
	1101	GX1165	1135	GZ420	1169	HD427	1203	HH691
	1102	GX576	1136	GZ378	1170	HD434	1204	HJ120
	1103	GX595	1137	GZ37	1171	HD499	1205	HJ140
	1104	GX606	1138	GY558	1172	HD569	1206	HJ181
30	1105	GX619	1139	GG894	1173	HD627	1207	HJ184
	1106	GG874	1140	GG907	1174	HD648	1208	HJ22
	1107	GG858	1141	GN114	1175	HE111	1209	HJ253
	1108	GG836	1142	GN115	1176	HE142	1210	HJ265
	1109	GG8	1143	GN145	1177	HE178	1211	HJ362

	1212	HJ395	1246	HM372	1280	HO722	1314	HT166
	1213	HJ411	1247	HM380	1281	HO799	1315	HT176
	1214	HJ444	1248	HM422	1282	HO801	1316	HT193
	1215	HJ65	1249	HM444	1283	HO817	1317	HT43
5	1216	HJ674	1250	HM497	1284	HO82	1318	HT81
	1217	HJ705	1251	HM544	1285	HK719	1319	HW149
	1218	HJ81	1252	HM643	1286	HO1077	1320	HW152
	1219	HJ862	1253	HN72	1287	HO1080	1321	HW190
	1220	HJ949	1254	HN78	1288	HO1087	1322	HW204
10	1221	HK10	1255	HO107	1289	HO1143	1323	HW221
	1222	HK26	1256	HO237	1290	HO1176	1324	HW243
	1223	HK60	1257	HO266	1291	HO1183	1325	HW261
	1224	HJ1037	1258	HO277	1292	HO1216	1326	HW368
	1225	HJ968	1259	HO283	1293	HO1271	1327	HW74
15	1226	HJ981	1260	HO292	1294	HO1329	1328	HX10
	1227	HJ994	1261	HO294	1295	HO1434	1329	HX102
	1228	HJ995	1262	HO305	1296	HO1441	1330	HX110
	1229	HK189	1263	HO315	1297	HO1453	1331	HX113
	1230	HK234	1264	HO332	1298	HO854	1332	HX155
20	1231	HK650	1265	HO358	1299	HO868	1333	HX188
	1232	HK658	1266	HO476	1300	HP262	1334	HX29
	1233	HK669	1267	HO481	1301	HQ36	1335	HX50
	1234	HK713	1268	HO502	1302	HQ72	1336	HY13
	1235	HK899	1269	HO54	1303	GM16	1337	HY3
25	1236	HE187	1270	HO60	1304	GM286	1338	HY55
	1237	HK162	1271	HO600	1305	GM295	1339	HY57
	1238	HL25	1272	HO617	1306	GM335	1340	HZ15
	1239	HL380	1273	HO640	1307	GM365	1341	HZ8
	1240	HL73	1274	HO663	1308	HR397	1342	IA1
30	1241	HM50	1275	HO688	1309	HR560	1343	IA21
	1242	HM54	1276	HO692	1310	HR593	1344	IA32
	1243	HM91	1277	HO693	1311	HR598	1345	IA36
	1244	HM236	1278	HO703	1312	HT13	1346	IB2
	1245	HM280	1279	HO717	1313	HT137	1347	IC2

	1348	IC9	1382	IA167	1413	HW786	1447	IE362
	1349	HY229	1383	IA183	1414	HW810	1448	IH32
	1350	HY244	1384	IA188	1415	HW846	1449	II113
	1351	HY344	1385	IA200	1416	HW849	1450	IJ101
5	1352	HY370	1386	IA220	1417	IB15	1451	IJ163
	1353	HY374	1387	IA64	1418	IB19	1452	IJ167
	1354	HY404	1388	IA69	1419	IB22	1453	IF28
	1355	HY419	1389	IA86	1420	IB28	1454	IF376
	1356	HY435	1390	HW936	1421	IB36	1455	IF456
10	1357	HZ103	1391		1422	IB49	1456	IF87
	1358	HZ109	HW1017		1423	IC103	1457	IJ1201
	1359	HZ111	1392		1424	IC126	1458	IJ1220
	1360	HZ115	HW1044		1425	IC132	1459	IJ1237
	1361	HZ71	1393		1426	IC142	1460	IJ1240
15	1362	HZ76	HW1059		1427	IC155	1461	IJ1247
	1363	HZ88	1394	HW430	1428	IC54	1462	IJ1287
	1364	HW115	1395	HW432	1429	IC87	1463	IJ1292
	1365	HW128	1396	HW440	1430	IC92	1464	IJ1299
	1366	HW477	1397	HW456	1431	IE146	1465	IJ583
20	1367	HW483	1398	HW518	1432	IE147	1466	IJ592
	1368	HW491	1399	HW591	1433	IE149	1467	IJ597
	1369	HW499	1400	HW598	1434	IE169	1468	IJ629
	1370	HW507	1401	HW627	1435	IZ6	1469	IJ638
	1371	HZ116	1402	HW646	1436	JE33	1470	IJ640
25	1372	HZ162	1403	HW649	1437	JE44	1471	IJ642
	1373	HZ185	1404	HW693	1438	JE52	1472	IJ686
	1374	HZ201	1405	HW695	1439	IE10	1473	IG25
	1375	HZ224	1406	HW697	1440	IE47	1474	IG35
	1376	HZ262	1407	HW711	1441	IE73	1475	IH40
30	1377	IA106	1408	HW715	1442	JA37	1476	IH54
	1378	IA110	1409	HW730	1443	JA78	1477	IJ288
	1379	IA114	1410	HW732	1444	JB12	1478	IJ76
	1380	IA153	1411	HW741	1445	JB23	1479	IF292
	1381	IA157	1412	HW750	1446	IE352	1480	IF513

	1481	IF548	1515	IQ58
	1482	IJ1043	1516	IS488
	1483	IJ1048	1517	IS564
	1484	IJ1054	1518	IT23
5	1485	IJ1088	1519	IT44
	1486	IJ777		
	1487	IJ887		
	1488	IJ907		
	1489	IJ928		
10	1490	IJ942		
	1491	IL1		
	1492	IL100		
	1493	IL112		
	1494	IL28		
15	1495	IK11		
	1496	IK14		
	1497	IK20		
	1498	IK203		
	1499	IK209		
20	1500	IK212		
	1501	IK343		
	1502	IK73		
	1503	IO134		
	1504	IO138		
25	1505	IO151		
	1506	IO202		
	1507	IO209		
	1508	IO31		
	1509	IO356		
30	1510	IO420		
	1511	IO62		
	1512	IQ15		
	1513	IQ45		
	1514	IQ55		

The "Clone ID No." for a particular clone consists of one or two letters followed by a number. The letters designate the tissue source from which the sEST was isolated. Table 3 below lists the various sources which were run through applicants' signal sequence trap. Thus, the tissue source for a particular sEST sequence can be identified in Table 3 by the one and two letter designations used in the relevant "Clone ID No.". For example, a clone designated as "BA312" would have been isolated from a human placenta (26 yrs.) library (i.e., selection "BA") as indicated in Table 3.

As used herein, "polynucleotide" includes single- and double-stranded RNAs, DNAs and RNA:DNA hybrids.

As used herein a "secreted" protein is one which, when expressed in a suitable host cell, is transported across or through a membrane, including transport as a result of signal sequences in its amino acid sequence. "Secreted" proteins include without limitation proteins secreted wholly (e.g., soluble proteins) or partially (e.g., receptors) from the cell in which they are expressed. "Secreted" proteins also include without limitation proteins which are transported across the membrane of the endoplasmic reticulum.

Fragments of the proteins of the present invention which are capable of exhibiting biological activity are also encompassed by the present invention. Fragments of the protein may be in linear form or they may be cyclized using known methods, for example, as described in H.U. Saragovi, *et al.*, Bio/Technology 10, 773-778 (1992) and in R.S. McDowell, *et al.*, J. Amer. Chem. Soc. 114, 9245-9253 (1992), both of which are incorporated herein by reference. Such fragments may be fused to carrier molecules such as immunoglobulins for many purposes, including increasing the valency of protein binding sites. For example, fragments of the protein may be fused through "linker" sequences to the Fc portion of an immunoglobulin. For a bivalent form of the protein, such a fusion could be to the Fc portion of an IgG molecule. Other immunoglobulin isotypes may also be used to generate such fusions. For example, a protein - IgM fusion would generate a decavalent form of the protein of the invention.

The present invention also provides both full-length and mature forms of the disclosed proteins. The full-length form of the such proteins is identified in the sequence listing by translation of the nucleotide sequence of each disclosed clone. The mature form of such protein may be obtained by expression of the disclosed full-length polynucleotide (preferably those deposited with ATCC) in a suitable mammalian cell or other host cell. The sequence of the mature form of the protein may also be determinable from the amino acid sequence of the full-length form.

The present invention also provides genes corresponding to the cDNA sequences disclosed herein. The corresponding genes can be isolated in accordance with known methods using the sequence information disclosed herein. Such methods include the preparation of probes or primers from the disclosed sequence information for identification
5 and/or amplification of genes in appropriate genomic libraries or other sources of genomic materials.

Where the protein of the present invention is membrane-bound (e.g., is a receptor), the present invention also provides for soluble forms of such protein. In such forms part or all of the intracellular and transmembrane domains of the protein are deleted such that
10 the protein is fully secreted from the cell in which it is expressed. The intracellular and transmembrane domains of proteins of the invention can be identified in accordance with known techniques for determination of such domains from sequence information.

Species homologs of the disclosed polynucleotides and proteins are also provided by the present invention. Species homologs may be isolated and identified by making
15 suitable probes or primers from the sequences provided herein and screening a suitable nucleic acid source from the desired species.

The invention also encompasses allelic variants of the disclosed polynucleotides or proteins; that is, naturally-occurring alternative forms of the isolated polynucleotide which also encode proteins which are identical, homologous or related to that encoded by the
20 polynucleotides disclosed herein.

The invention also includes polynucleotides with sequences complementary to those of the polynucleotides disclosed herein.

The present invention also includes polynucleotides capable of hybridizing, preferably under reduced stringency conditions, more preferably under stringent conditions,
25 most preferably under highly stringent conditions, to polynucleotides described herein. Examples of stringency conditions are shown in Table 1 below: highly stringent conditions are those that are at least as stringent as, for example, conditions A-F; stringent conditions are at least as stringent as, for example, conditions G-L; and reduced stringency conditions are at least as stringent as, for example, conditions M-R.

Table 1

	Stringency Condition	Polynucleotide Hybrid	Hybrid Length (bp) [‡]	Hybridization Temperature and Buffer [†]	Wash Temperature and Buffer [†]
5	A	DNA:DNA	≥ 50	65°C; 1xSSC -or- 42°C; 1xSSC, 50% formamide	65°C; 0.3xSSC
	B	DNA:DNA	< 50	T _B *; 1xSSC	T _B *; 1xSSC
	C	DNA:RNA	≥ 50	67°C; 1xSSC -or- 45°C; 1xSSC, 50% formamide	67°C; 0.3xSSC
	D	DNA:RNA	< 50	T _D *; 1xSSC	T _D *; 1xSSC
	E	RNA:RNA	≥ 50	70°C; 1xSSC -or- 50°C; 1xSSC, 50% formamide	70°C; 0.3xSSC
10	F	RNA:RNA	< 50	T _F *; 1xSSC	T _F *; 1xSSC
	G	DNA:DNA	≥ 50	65°C; 4xSSC -or- 42°C; 4xSSC, 50% formamide	65°C; 1xSSC
	H	DNA:DNA	< 50	T _H *; 4xSSC	T _H *; 4xSSC
	I	DNA:RNA	≥ 50	67°C; 4xSSC -or- 45°C; 4xSSC, 50% formamide	67°C; 1xSSC
	J	DNA:RNA	< 50	T _J *; 4xSSC	T _J *; 4xSSC
15	K	RNA:RNA	≥ 50	70°C; 4xSSC -or- 50°C; 4xSSC, 50% formamide	67°C; 1xSSC
	L	RNA:RNA	< 50	T _L *; 2xSSC	T _L *; 2xSSC
	M	DNA:DNA	≥ 50	50°C; 4xSSC -or- 40°C; 6xSSC, 50% formamide	50°C; 2xSSC
	N	DNA:DNA	< 50	T _N *; 6xSSC	T _N *; 6xSSC
	O	DNA:RNA	≥ 50	55°C; 4xSSC -or- 42°C; 6xSSC, 50% formamide	55°C; 2xSSC
20	P	DNA:RNA	< 50	T _P *; 6xSSC	T _P *; 6xSSC
	Q	RNA:RNA	≥ 50	60°C; 4xSSC -or- 45°C; 6xSSC, 50% formamide	60°C; 2xSSC
	R	RNA:RNA	< 50	T _R *; 4xSSC	T _R *; 4xSSC

‡: The hybrid length is that anticipated for the hybridized region(s) of the hybridizing polynucleotides. When hybridizing a polynucleotide to a target polynucleotide of unknown sequence, the hybrid length is assumed to be that of the hybridizing polynucleotide. When polynucleotides of known sequence are hybridized, the hybrid length can be determined by aligning the sequences of the polynucleotides and identifying the region or regions of optimal sequence complementarity.

†: SSPE (1xSSPE is 0.15M NaCl, 10mM NaH₂PO₄, and 1.25mM EDTA, pH 7.4) can be substituted for SSC (1xSSC is 0.15M NaCl and 15mM sodium citrate) in the hybridization and wash buffers; washes are performed for 15 minutes after hybridization is complete.

*T_B - T_R: The hybridization temperature for hybrids anticipated to be less than 50 base pairs in length should be 5-10°C less than the melting temperature (T_m) of the hybrid, where T_m is determined according to the following equations. For hybrids less than 18 base pairs in length, T_m(°C) = 2(# of A + T bases) + 4(# of G + C bases). For hybrids between 18 and 49 base pairs in length, T_m(°C) = 81.5 + 16.6(log [Na⁺]) + 0.41(%G+C) - (600/N), where N is the number of bases in the hybrid, and [Na⁺] is the concentration of sodium ions in the hybridization buffer ([Na⁺] for 1xSSC = 0.165 M).

Additional examples of stringency conditions for polynucleotide hybridization are provided in Sambrook, J., E.F. Fritsch, and T. Maniatis, 1989, *Molecular Cloning: A Laboratory Manual*, Cold Spring Harbor Laboratory Press, Cold Spring Harbor, NY, chapters 9 and 11, and *Current Protocols in Molecular Biology*, 1995, F.M. Ausubel et al., eds., John Wiley & Sons, Inc., sections 2.10 and 6.3-6.4, incorporated herein by reference.

Preferably, such hybridizing polynucleotides have at least 70% sequence identity (more preferably, at least 80% identity; most preferably at least 90% or 95% identity) with the polynucleotide of the present invention to which they hybridize, where sequence identity is determined by comparing the sequences of the hybridizing polynucleotides when aligned so as to maximize overlap and identity while minimizing sequence gaps. ~~The isolated~~

The isolated polynucleotide encoding the protein of the invention may be operably linked to an expression control sequence such as the pMT2 or pED expression vectors disclosed in Kaufman *et al.*, *Nucleic Acids Res.* **19**, 4485-4490 (1991), in order to produce the protein recombinantly. Many suitable expression control sequences are known in the art. General methods of expressing recombinant proteins are also known and are exemplified in R. Kaufman, *Methods in Enzymology* **185**, 537-566 (1990). As defined herein "operably linked" means that the isolated polynucleotide of the invention and an expression control

sequence are situated within a vector or cell in such a way that the protein is expressed by a host cell which has been transformed (transfected) with the ligated polynucleotide/expression control sequence.

5 A number of types of cells may act as suitable host cells for expression of the protein. Mammalian host cells include, for example, monkey COS cells, Chinese Hamster Ovary (CHO) cells, human kidney 293 cells, human epidermal A431 cells, human Colo205 cells, 3T3 cells, CV-1 cells, other transformed primate cell lines, normal diploid cells, cell strains derived from *in vitro* culture of primary tissue, primary explants, HeLa cells, mouse L cells, BHK, HL-60, U937, HaK or Jurkat cells.

10 Alternatively, it may be possible to produce the protein in lower eukaryotes such as yeast or in prokaryotes such as bacteria. Potentially suitable yeast strains include *Saccharomyces cerevisiae*, *Schizosaccharomyces pombe*, *Kluyveromyces* strains, *Candida*, or any yeast strain capable of expressing heterologous proteins. Potentially suitable bacterial strains include *Escherichia coli*, *Bacillus subtilis*, *Salmonella typhimurium*, or any
15 bacterial strain capable of expressing heterologous proteins. If the protein is made in yeast or bacteria, it may be necessary to modify the protein produced therein, for example by phosphorylation or glycosylation of the appropriate sites, in order to obtain the functional protein. Such covalent attachments may be accomplished using known chemical or enzymatic methods.

20 The protein may also be produced by operably linking the isolated polynucleotide of the invention to suitable control sequences in one or more insect expression vectors, and employing an insect expression system. Materials and methods for baculovirus/insect cell expression systems are commercially available in kit form from, *e.g.*, Invitrogen, San Diego, California, U.S.A. (the MaxBac® kit), and such methods are well known in the art,
25 as described in Summers and Smith, Texas Agricultural Experiment Station Bulletin No. 1555 (1987), incorporated herein by reference. As used herein, an insect cell capable of expressing a polynucleotide of the present invention is "transformed."

The protein of the invention may be prepared by culturing transformed host cells under culture conditions suitable to express the recombinant protein. The resulting
30 expressed protein may then be purified from such culture (*i.e.*, from culture medium or cell extracts) using known purification processes, such as gel filtration and ion exchange chromatography. The purification of the protein may also include an affinity column containing agents which will bind to the protein; one or more column steps over such affinity resins as concanavalin A-agarose, heparin-toyopearl® or Cibacrom blue 3GA

Sepharose®; one or more steps involving hydrophobic interaction chromatography using such resins as phenyl ether, butyl ether, or propyl ether; or immunoaffinity chromatography.

Alternatively, the protein of the invention may also be expressed in a form which will facilitate purification. For example, it may be expressed as a fusion protein, such as those of maltose binding protein (MBP), glutathione-S-transferase (GST) or thioredoxin (TRX). Kits for expression and purification of such fusion proteins are commercially available from New England BioLab (Beverly, MA), Pharmacia (Piscataway, NJ) and InVitrogen, respectively. The protein can also be tagged with an epitope and subsequently purified by using a specific antibody directed to such epitope. One such epitope ("Flag") is commercially available from Kodak (New Haven, CT).

Finally, one or more reverse-phase high performance liquid chromatography (RP-HPLC) steps employing hydrophobic RP-HPLC media, e.g., silica gel having pendant methyl or other aliphatic groups, can be employed to further purify the protein. Some or all of the foregoing purification steps, in various combinations, can also be employed to provide a substantially homogeneous isolated recombinant protein. The protein thus purified is substantially free of other mammalian proteins and is defined in accordance with the present invention as an "isolated protein."

The protein of the invention may also be expressed as a product of transgenic animals, e.g., as a component of the milk of transgenic cows, goats, pigs, or sheep which are characterized by somatic or germ cells containing a nucleotide sequence encoding the protein.

The protein may also be produced by known conventional chemical synthesis. Methods for constructing the proteins of the present invention by synthetic means are known to those skilled in the art. The synthetically-constructed protein sequences, by virtue of sharing primary, secondary or tertiary structural and/or conformational characteristics with proteins may possess biological properties in common therewith, including protein activity. Thus, they may be employed as biologically active or immunological substitutes for natural, purified proteins in screening of therapeutic compounds and in immunological processes for the development of antibodies.

The proteins provided herein also include proteins characterized by amino acid sequences similar to those of purified proteins but into which modification are naturally provided or deliberately engineered. For example, modifications in the peptide or DNA sequences can be made by those skilled in the art using known techniques. Modifications

of interest in the protein sequences may include the alteration, substitution, replacement, insertion or deletion of a selected amino acid residue in the coding sequence. For example, one or more of the cysteine residues may be deleted or replaced with another amino acid to alter the conformation of the molecule. Techniques for such alteration, substitution, replacement, insertion or deletion are well known to those skilled in the art (see, e.g., U.S. Patent No. 4,518,584). Preferably, such alteration, substitution, replacement, insertion or deletion retains the desired activity of the protein.

Other fragments and derivatives of the sequences of proteins which would be expected to retain protein activity in whole or in part and may thus be useful for screening or other immunological methodologies may also be easily made by those skilled in the art given the disclosures herein. Such modifications are believed to be encompassed by the present invention.

USES AND BIOLOGICAL ACTIVITY

The polynucleotides and proteins of the present invention are expected to exhibit one or more of the uses or biological activities (including those associated with assays cited herein) identified below. Uses or activities described for proteins of the present invention may be provided by administration or use of such proteins or by administration or use of polynucleotides encoding such proteins (such as, for example, in gene therapies or vectors suitable for introduction of DNA).

Research Uses and Utilities

The polynucleotides provided by the present invention can be used by the research community for various purposes. The primary use of polynucleotides of the invention which are sESTs is as probes for the identification and isolation of full-length cDNAs and genomic DNA molecules which correspond (i.e., is a longer polynucleotide sequence of which substantially the entire sEST is a fragment in the case of a full-length cDNA, or which encodes the sEST in the case of a genomic DNA molecule) to such sESTs. Techniques for use of such sequences as probes for larger cDNAs or genomic molecules are well known in the art.

The polynucleotides can also be used to express recombinant protein for analysis, characterization or therapeutic use; as markers for tissues in which the corresponding protein is preferentially expressed (either constitutively or at a particular stage of tissue differentiation or development or in disease states); as molecular weight markers on Southern gels; as chromosome markers or tags (when labeled) to identify chromosomes or to map related gene positions; to compare with endogenous DNA sequences in patients to identify potential genetic disorders; as probes to hybridize and thus discover novel, related DNA sequences; as a source of information to derive PCR primers for genetic fingerprinting; as a probe to "subtract-out" known sequences in the process of discovering other novel polynucleotides; for selecting and making oligomers for attachment to a "gene chip" or other support, including for examination of expression patterns; to raise anti-protein antibodies using DNA immunization techniques; and as an antigen to raise anti-DNA antibodies or elicit another immune response. Where the polynucleotide encodes a protein which binds or potentially binds to another protein (such as, for example, in a receptor-ligand interaction), the polynucleotide can also be used in interaction trap assays (such as, for example, that described in Gyuris et al., Cell 75:791-803 (1993)) to identify

polynucleotides encoding the other protein with which binding occurs or to identify inhibitors of the binding interaction.

The proteins provided by the present invention can similarly be used in assay to determine biological activity, including in a panel of multiple proteins for high-throughput screening; to raise antibodies or to elicit another immune response; as a reagent (including the labeled reagent) in assays designed to quantitatively determine levels of the protein (or its receptor) in biological fluids; as markers for tissues in which the corresponding protein is preferentially expressed (either constitutively or at a particular stage of tissue differentiation or development or in a disease state); and, of course, to isolate correlative receptors or ligand.. Where the protein binds or potentially binds to another protein (such as, for example, in a receptor-ligand interaction), the protein can be used to identify the other protein with which binding occurs or to identify inhibitors of the binding interaction. Proteins involved in these binding interactions can also be used to screen for peptide or small molecule inhibitors or agonists of the binding interaction.

Any or all of these research utilities are capable of being developed into reagent grade or kit format for commercialization as research products.

Methods for performing the uses listed above are well known to those skilled in the art. References disclosing such methods include without limitation "Molecular Cloning: A Laboratory Manual", 2d ed., Cold Spring Harbor Laboratory Press, Sambrook, J., E.F. Fritsch and T. Maniatis eds., 1989, and "Methods in Enzymology: Guide to Molecular Cloning Techniques", Academic Press, Berger, S.L. and A.R. Kimmel eds., 1987.

Nutritional Uses

Polynucleotides and proteins of the present invention can also be used as nutritional sources or supplements. Such uses include without limitation use as a protein or amino acid supplement, use as a carbon source, use as a nitrogen source and use as a source of carbohydrate. In such cases the protein or polynucleotide of the invention can be added to the feed of a particular organism or can be administered as a separate solid or liquid preparation, such as in the form of powder, pills, solutions, suspensions or capsules. In the case of microorganisms, the protein or polynucleotide of the invention can be added to the medium in or on which the microorganism is cultured.

Cytokine and Cell Proliferation/Differentiation Activity

A protein of the present invention may exhibit cytokine, cell proliferation (either inducing or inhibiting) or cell differentiation (either inducing or inhibiting) activity or may induce production of other cytokines in certain cell populations. Many protein factors discovered to date, including all known cytokines, have exhibited activity in one or more factor dependent cell proliferation assays, and hence the assays serve as a convenient confirmation of cytokine activity. The activity of a protein of the present invention is evidenced by any one of a number of routine factor dependent cell proliferation assays for cell lines including, without limitation, 32D, DA2, DA1G, T10, B9, B9/11, BaF3, MC9/G, M+ (preB M+), 2E8, RB5, DA1, 123, T1165, HT2, CTLL2, TF-1, Mo7e and CMK.

The activity of a protein of the invention may, among other means, be measured by the following methods:

Assays for T-cell or thymocyte proliferation include without limitation those described in: *Current Protocols in Immunology*, Ed by J. E. Coligan, A.M. Kruisbeek, D.H. Margulies, E.M. Shevach, W Strober, Pub. Greene Publishing Associates and Wiley-Interscience (Chapter 3, *In Vitro* assays for Mouse Lymphocyte Function 3.1-3.19; Chapter 7, *Immunologic studies in Humans*); Takai et al., *J. Immunol.* 137:3494-3500, 1986; Bertagnolli et al., *J. Immunol.* 145:1706-1712, 1990; Bertagnolli et al., *Cellular Immunology* 133:327-341, 1991; Bertagnolli, et al., *J. Immunol.* 149:3778-3783, 1992; Bowman et al., *J. Immunol.* 152: 1756-1761, 1994.

Assays for cytokine production and/or proliferation of spleen cells, lymph node cells or thymocytes include, without limitation, those described in: *Polyclonal T cell stimulation*, Kruisbeek, A.M. and Shevach, E.M. In *Current Protocols in Immunology*. J.E.e.a. Coligan eds. Vol 1 pp. 3.12.1-3.12.14, John Wiley and Sons, Toronto. 1994; and *Measurement of mouse and human Interferon γ* , Schreiber, R.D. In *Current Protocols in Immunology*. J.E.e.a. Coligan eds. Vol 1 pp. 6.8.1-6.8.8, John Wiley and Sons, Toronto. 1994.

Assays for proliferation and differentiation of hematopoietic and lymphopoietic cells include, without limitation, those described in: *Measurement of Human and Murine Interleukin 2 and Interleukin 4*, Bottomly, K., Davis, L.S. and Lipsky, P.E. In *Current Protocols in Immunology*. J.E.e.a. Coligan eds. Vol 1 pp. 6.3.1-6.3.12, John Wiley and Sons, Toronto. 1991; deVries et al., *J. Exp. Med.* 173:1205-1211, 1991; Moreau et al., *Nature* 336:690-692, 1988; Greenberger et al., *Proc. Natl. Acad. Sci. U.S.A.* 80:2931-2938, 1983; *Measurement of mouse and human interleukin 6* - Nordan, R. In *Current Protocols in Immunology*. J.E.e.a. Coligan eds. Vol 1 pp. 6.6.1-6.6.5, John Wiley

- and Sons, Toronto. 1991; Smith et al., Proc. Natl. Acad. Sci. U.S.A. 83:1857-1861, 1986; Measurement of human Interleukin 11 - Bennett, F., Giannotti, J., Clark, S.C. and Turner, K. J. In *Current Protocols in Immunology*. J.E.e.a. Coligan eds. Vol 1 pp. 6.15.1 John Wiley and Sons, Toronto. 1991; Measurement of mouse and human Interleukin 9 -
- 5 Ciarletta, A., Giannotti, J., Clark, S.C. and Turner, K.J. In *Current Protocols in Immunology*. J.E.e.a. Coligan eds. Vol 1 pp. 6.13.1, John Wiley and Sons, Toronto. 1991.

- Assays for T-cell clone responses to antigens (which will identify, among others, proteins that affect APC-T cell interactions as well as direct T-cell effects by measuring proliferation and cytokine production) include, without limitation, those described in:
- 10 *Current Protocols in Immunology*, Ed by J. E. Coligan, A.M. Kruisbeek, D.H. Margulies, E.M. Shevach, W Strober, Pub. Greene Publishing Associates and Wiley-Interscience (Chapter 3, In Vitro assays for Mouse Lymphocyte Function; Chapter 6, Cytokines and their cellular receptors; Chapter 7, Immunologic studies in Humans); Weinberger et al., Proc. Natl. Acad. Sci. USA 77:6091-6095, 1980; Weinberger et al., Eur. J. Immun.
- 15 11:405-411, 1981; Takai et al., J. Immunol. 137:3494-3500, 1986; Takai et al., J. Immunol. 140:508-512, 1988.

Immune Stimulating or Suppressing Activity

- A protein of the present invention may also exhibit immune stimulating or immune
- 20 suppressing activity, including without limitation the activities for which assays are described herein. A protein may be useful in the treatment of various immune deficiencies and disorders (including severe combined immunodeficiency (SCID)), e.g., in regulating (up or down) growth and proliferation of T and/or B lymphocytes, as well as effecting the cytolytic activity of NK cells and other cell populations. These immune deficiencies may
- 25 be genetic or be caused by viral (e.g., HIV) as well as bacterial or fungal infections, or may result from autoimmune disorders. More specifically, infectious diseases caused by viral, bacterial, fungal or other infection may be treatable using a protein of the present invention, including infections by HIV, hepatitis viruses, herpesviruses, mycobacteria, *Leishmania* spp., malaria spp. and various fungal infections such as candidiasis. Of course,
- 30 in this regard, a protein of the present invention may also be useful where a boost to the immune system generally may be desirable, *i.e.*, in the treatment of cancer.

Autoimmune disorders which may be treated using a protein of the present invention include, for example, connective tissue disease, multiple sclerosis, systemic lupus erythematosus, rheumatoid arthritis, autoimmune pulmonary inflammation, Guillain-Barre

syndrome, autoimmune thyroiditis, insulin dependent diabetes mellitus, myasthenia gravis, graft-versus-host disease and autoimmune inflammatory eye disease. Such a protein of the present invention may also be useful in the treatment of allergic reactions and conditions, such as asthma (particularly allergic asthma) or other respiratory problems. Other
5 conditions, in which immune suppression is desired (including, for example, organ transplantation), may also be treatable using a protein of the present invention.

Using the proteins of the invention it may also be possible to immune responses, in a number of ways. Down regulation may be in the form of inhibiting or blocking an immune response already in progress or may involve preventing the induction of an immune
10 response. The functions of activated T cells may be inhibited by suppressing T cell responses or by inducing specific tolerance in T cells, or both. Immunosuppression of T cell responses is generally an active, non-antigen-specific, process which requires continuous exposure of the T cells to the suppressive agent. Tolerance, which involves inducing non-responsiveness or anergy in T cells, is distinguishable from
15 immunosuppression in that it is generally antigen-specific and persists after exposure to the tolerizing agent has ceased. Operationally, tolerance can be demonstrated by the lack of a T cell response upon reexposure to specific antigen in the absence of the tolerizing agent.

Down regulating or preventing one or more antigen functions (including without limitation B lymphocyte antigen functions (such as , for example, B7)), *e.g.*, preventing
20 high level lymphokine synthesis by activated T cells, will be useful in situations of tissue, skin and organ transplantation and in graft-versus-host disease (GVHD). For example, blockage of T cell function should result in reduced tissue destruction in tissue transplantation. Typically, in tissue transplants, rejection of the transplant is initiated through its recognition as foreign by T cells, followed by an immune reaction that destroys
25 the transplant. The administration of a molecule which inhibits or blocks interaction of a B7 lymphocyte antigen with its natural ligand(s) on immune cells (such as a soluble, monomeric form of a peptide having B7-2 activity alone or in conjunction with a monomeric form of a peptide having an activity of another B lymphocyte antigen (*e.g.*, B7-1, B7-3) or blocking antibody), prior to transplantation can lead to the binding of the
30 molecule to the natural ligand(s) on the immune cells without transmitting the corresponding costimulatory signal. Blocking B lymphocyte antigen function in this matter prevents cytokine synthesis by immune cells, such as T cells, and thus acts as an immunosuppressant. Moreover, the lack of costimulation may also be sufficient to anergize the T cells, thereby inducing tolerance in a subject. Induction of long-term tolerance by B lymphocyte antigen-

blocking reagents may avoid the necessity of repeated administration of these blocking reagents. To achieve sufficient immunosuppression or tolerance in a subject, it may also be necessary to block the function of a combination of B lymphocyte antigens.

5 The efficacy of particular blocking reagents in preventing organ transplant rejection or GVHD can be assessed using animal models that are predictive of efficacy in humans. Examples of appropriate systems which can be used include allogeneic cardiac grafts in rats and xenogeneic pancreatic islet cell grafts in mice, both of which have been used to examine the immunosuppressive effects of CTLA4Ig fusion proteins *in vivo* as described in Lenschow *et al.*, Science 257:789-792 (1992) and Turka *et al.*, Proc. Natl. Acad. Sci
10 USA, 89:11102-11105 (1992). In addition, murine models of GVHD (see Paul ed., Fundamental Immunology, Raven Press, New York, 1989, pp. 846-847) can be used to determine the effect of blocking B lymphocyte antigen function *in vivo* on the development of that disease.

Blocking antigen function may also be therapeutically useful for treating
15 autoimmune diseases. Many autoimmune disorders are the result of inappropriate activation of T cells that are reactive against self tissue and which promote the production of cytokines and autoantibodies involved in the pathology of the diseases. Preventing the activation of autoreactive T cells may reduce or eliminate disease symptoms. Administration of reagents which block costimulation of T cells by disrupting receptor:ligand interactions of B
20 lymphocyte antigens can be used to inhibit T cell activation and prevent production of autoantibodies or T cell-derived cytokines which may be involved in the disease process. Additionally, blocking reagents may induce antigen-specific tolerance of autoreactive T cells which could lead to long-term relief from the disease. The efficacy of blocking reagents in preventing or alleviating autoimmune disorders can be determined using a number of
25 well-characterized animal models of human autoimmune diseases. Examples include murine experimental autoimmune encephalitis, systemic lupus erythematosus in MRL/lpr/lpr mice or NZB hybrid mice, murine autoimmune collagen arthritis, diabetes mellitus in NOD mice and BB rats, and murine experimental myasthenia gravis (see Paul ed., Fundamental Immunology, Raven Press, New York, 1989, pp. 840-856).

30 Upregulation of an antigen function (preferably a B lymphocyte antigen function), as a means of up regulating immune responses, may also be useful in therapy. Upregulation of immune responses may be in the form of enhancing an existing immune response or eliciting an initial immune response. For example, enhancing an immune response through stimulating B lymphocyte antigen function may be useful in cases of viral

infection. In addition, systemic viral diseases such as influenza, the common cold, and encephalitis might be alleviated by the administration of stimulatory forms of B lymphocyte antigens systemically.

Alternatively, anti-viral immune responses may be enhanced in an infected patient
5 by removing T cells from the patient, costimulating the T cells *in vitro* with viral antigen-
pulsed APCs either expressing a peptide of the present invention or together with a
stimulatory form of a soluble peptide of the present invention and reintroducing the *in vitro*
activated T cells into the patient. Another method of enhancing anti-viral immune responses
would be to isolate infected cells from a patient, transfect them with a nucleic acid encoding
10 a protein of the present invention as described herein such that the cells express all or a
portion of the protein on their surface, and reintroduce the transfected cells into the patient.
The infected cells would now be capable of delivering a costimulatory signal to, and thereby
activate, T cells *in vivo*.

In another application, up regulation or enhancement of antigen function (preferably
15 B lymphocyte antigen function) may be useful in the induction of tumor immunity. Tumor
cells (*e.g.*, sarcoma, melanoma, lymphoma, leukemia, neuroblastoma, carcinoma)
transfected with a nucleic acid encoding at least one peptide of the present invention can be
administered to a subject to overcome tumor-specific tolerance in the subject. If desired,
the tumor cell can be transfected to express a combination of peptides. For example, tumor
20 cells obtained from a patient can be transfected *ex vivo* with an expression vector directing
the expression of a peptide having B7-2-like activity alone, or in conjunction with a peptide
having B7-1-like activity and/or B7-3-like activity. The transfected tumor cells are returned
to the patient to result in expression of the peptides on the surface of the transfected cell.
Alternatively, gene therapy techniques can be used to target a tumor cell for transfection
25 *in vivo*.

The presence of the peptide of the present invention having the activity of a B
lymphocyte antigen(s) on the surface of the tumor cell provides the necessary costimulation
signal to T cells to induce a T cell mediated immune response against the transfected tumor
cells. In addition, tumor cells which lack MHC class I or MHC class II molecules, or
30 which fail to reexpress sufficient amounts of MHC class I or MHC class II molecules, can
be transfected with nucleic acid encoding all or a portion of (*e.g.*, a cytoplasmic-domain
truncated portion) of an MHC class I α chain protein and β_2 microglobulin protein or an
MHC class II α chain protein and an MHC class II β chain protein to thereby express MHC
class I or MHC class II proteins on the cell surface. Expression of the appropriate class I

or class II MHC in conjunction with a peptide having the activity of a B lymphocyte antigen (e.g., B7-1, B7-2, B7-3) induces a T cell mediated immune response against the transfected tumor cell. Optionally, a gene encoding an antisense construct which blocks expression of an MHC class II associated protein, such as the invariant chain, can also be cotransfected
5 with a DNA encoding a peptide having the activity of a B lymphocyte antigen to promote presentation of tumor associated antigens and induce tumor specific immunity. Thus, the induction of a T cell mediated immune response in a human subject may be sufficient to overcome tumor-specific tolerance in the subject.

The activity of a protein of the invention may, among other means, be measured
10 by the following methods:

Suitable assays for thymocyte or splenocyte cytotoxicity include, without limitation, those described in: *Current Protocols in Immunology*, Ed by J. E. Coligan, A.M. Kruisbeek, D.H. Margulies, E.M. Shevach, W Strober, Pub. Greene Publishing Associates and Wiley-Interscience (Chapter 3, *In Vitro* assays for Mouse Lymphocyte Function 3.1-
15 3.19; Chapter 7, *Immunologic studies in Humans*); Herrmann et al., *Proc. Natl. Acad. Sci. USA* 78:2488-2492, 1981; Herrmann et al., *J. Immunol.* 128:1968-1974, 1982; Handa et al., *J. Immunol.* 135:1564-1572, 1985; Takai et al., *J. Immunol.* 137:3494-3500, 1986; Takai et al., *J. Immunol.* 140:508-512, 1988; Herrmann et al., *Proc. Natl. Acad. Sci. USA* 78:2488-2492, 1981; Herrmann et al., *J. Immunol.* 128:1968-1974, 1982; Handa
20 et al., *J. Immunol.* 135:1564-1572, 1985; Takai et al., *J. Immunol.* 137:3494-3500, 1986; Bowman et al., *J. Virology* 61:1992-1998; Takai et al., *J. Immunol.* 140:508-512, 1988; Bertagnolli et al., *Cellular Immunology* 133:327-341, 1991; Brown et al., *J. Immunol.* 153:3079-3092, 1994.

Assays for T-cell-dependent immunoglobulin responses and isotype switching
25 (which will identify, among others, proteins that modulate T-cell dependent antibody responses and that affect Th1/Th2 profiles) include, without limitation, those described in: Maliszewski, *J. Immunol.* 144:3028-3033, 1990; and Assays for B cell function: *In vitro* antibody production, Mond, J.J. and Brunswick, M. In *Current Protocols in Immunology*. J.E.e.a. Coligan eds. Vol 1 pp. 3.8.1-3.8.16, John Wiley and Sons, Toronto. 1994.

30 Mixed lymphocyte reaction (MLR) assays (which will identify, among others, proteins that generate predominantly Th1 and CTL responses) include, without limitation, those described in: *Current Protocols in Immunology*, Ed by J. E. Coligan, A.M. Kruisbeek, D.H. Margulies, E.M. Shevach, W Strober, Pub. Greene Publishing Associates and Wiley-Interscience (Chapter 3, *In Vitro* assays for Mouse Lymphocyte Function 3.1-

3.19; Chapter 7, Immunologic studies in Humans); Takai et al., J. Immunol. 137:3494-3500, 1986; Takai et al., J. Immunol. 140:508-512, 1988; Bertagnolli et al., J. Immunol. 149:3778-3783, 1992.

Dendritic cell-dependent assays (which will identify, among others, proteins expressed by dendritic cells that activate naive T-cells) include, without limitation, those described in: Guery et al., J. Immunol. 134:536-544, 1995; Inaba et al., Journal of Experimental Medicine 173:549-559, 1991; Macatonia et al., Journal of Immunology 154:5071-5079, 1995; Porgador et al., Journal of Experimental Medicine 182:255-260, 1995; Nair et al., Journal of Virology 67:4062-4069, 1993; Huang et al., Science 264:961-965, 1994; Macatonia et al., Journal of Experimental Medicine 169:1255-1264, 1989; Bhardwaj et al., Journal of Clinical Investigation 94:797-807, 1994; and Inaba et al., Journal of Experimental Medicine 172:631-640, 1990.

Assays for lymphocyte survival/apoptosis (which will identify, among others, proteins that prevent apoptosis after superantigen induction and proteins that regulate lymphocyte homeostasis) include, without limitation, those described in: Darzynkiewicz et al., Cytometry 13:795-808, 1992; Gorczyca et al., Leukemia 7:659-670, 1993; Gorczyca et al., Cancer Research 53:1945-1951, 1993; Itoh et al., Cell 66:233-243, 1991; Zacharchuk, Journal of Immunology 145:4037-4045, 1990; Zamai et al., Cytometry 14:891-897, 1993; Gorczyca et al., International Journal of Oncology 1:639-648, 1992.

Assays for proteins that influence early steps of T-cell commitment and development include, without limitation, those described in: Antica et al., Blood 84:111-117, 1994; Fine et al., Cellular Immunology 155:111-122, 1994; Galy et al., Blood 85:2770-2778, 1995; Toki et al., Proc. Nat. Acad Sci. USA 88:7548-7551, 1991.

Hematopoiesis Regulating Activity

A protein of the present invention may be useful in regulation of hematopoiesis and, consequently, in the treatment of myeloid or lymphoid cell deficiencies. Even marginal biological activity in support of colony forming cells or of factor-dependent cell lines indicates involvement in regulating hematopoiesis, e.g. in supporting the growth and proliferation of erythroid progenitor cells alone or in combination with other cytokines, thereby indicating utility, for example, in treating various anemias or for use in conjunction with irradiation/chemotherapy to stimulate the production of erythroid precursors and/or erythroid cells; in supporting the growth and proliferation of myeloid cells such as granulocytes and monocytes/macrophages (i.e., traditional CSF activity) useful, for

example, in conjunction with chemotherapy to prevent or treat consequent myelo-suppression; in supporting the growth and proliferation of megakaryocytes and consequently of platelets thereby allowing prevention or treatment of various platelet disorders such as thrombocytopenia, and generally for use in place of or complimentary to platelet transfusions; and/or in supporting the growth and proliferation of hematopoietic stem cells which are capable of maturing to any and all of the above-mentioned hematopoietic cells and therefore find therapeutic utility in various stem cell disorders (such as those usually treated with transplantation, including, without limitation, aplastic anemia and paroxysmal nocturnal hemoglobinuria), as well as in repopulating the stem cell compartment post irradiation/chemotherapy, either *in-vivo* or *ex-vivo* (i.e., in conjunction with bone marrow transplantation or with peripheral progenitor cell transplantation (homologous or heterologous)) as normal cells or genetically manipulated for gene therapy.

The activity of a protein of the invention may, among other means, be measured by the following methods:

Suitable assays for proliferation and differentiation of various hematopoietic lines are cited above.

Assays for embryonic stem cell differentiation (which will identify, among others, proteins that influence embryonic differentiation hematopoiesis) include, without limitation, those described in: Johansson et al. *Cellular Biology* 15:141-151, 1995; Keller et al., *Molecular and Cellular Biology* 13:473-486, 1993; McClanahan et al., *Blood* 81:2903-2915, 1993.

Assays for stem cell survival and differentiation (which will identify, among others, proteins that regulate lympho-hematopoiesis) include, without limitation, those described in: Methylcellulose colony forming assays, Freshney, M.G. In *Culture of Hematopoietic Cells*. R.I. Freshney, et al. eds. Vol pp. 265-268, Wiley-Liss, Inc., New York, NY. 1994; Hirayama et al., *Proc. Natl. Acad. Sci. USA* 89:5907-5911, 1992; Primitive hematopoietic colony forming cells with high proliferative potential, McNiece, I.K. and Briddell, R.A. In *Culture of Hematopoietic Cells*. R.I. Freshney, et al. eds. Vol pp. 23-39, Wiley-Liss, Inc., New York, NY. 1994; Neben et al., *Experimental Hematology* 22:353-359, 1994; Cobblestone area forming cell assay, Ploemacher, R.E. In *Culture of Hematopoietic Cells*. R.I. Freshney, et al. eds. Vol pp. 1-21, Wiley-Liss, Inc., New York, NY. 1994; Long term bone marrow cultures in the presence of stromal cells, Spooncer, E., Dexter, M. and Allen, T. In *Culture of Hematopoietic Cells*. R.I. Freshney, et al. eds. Vol pp. 163-179, Wiley-Liss, Inc., New York, NY. 1994; Long term culture initiating cell assay, Sutherland,

H.J. In *Culture of Hematopoietic Cells*. R.I. Freshney, *et al.* eds. Vol pp. 139-162, Wiley-Liss, Inc., New York, NY. 1994.

Tissue Growth Activity

5 A protein of the present invention also may have utility in compositions used for bone, cartilage, tendon, ligament and/or nerve tissue growth or regeneration, as well as for wound healing and tissue repair and replacement, and in the treatment of burns, incisions and ulcers.

10 A protein of the present invention, which induces cartilage and/or bone growth in circumstances where bone is not normally formed, has application in the healing of bone fractures and cartilage damage or defects in humans and other animals. Such a preparation employing a protein of the invention may have prophylactic use in closed as well as open fracture reduction and also in the improved fixation of artificial joints. *De novo* bone formation induced by an osteogenic agent contributes to the repair of congenital, trauma
15 induced, or oncologic resection induced craniofacial defects, and also is useful in cosmetic plastic surgery.

A protein of this invention may also be used in the treatment of periodontal disease, and in other tooth repair processes. Such agents may provide an environment to attract bone-forming cells, stimulate growth of bone-forming cells or induce differentiation of
20 progenitors of bone-forming cells. A protein of the invention may also be useful in the treatment of osteoporosis or osteoarthritis, such as through stimulation of bone and/or cartilage repair or by blocking inflammation or processes of tissue destruction (collagenase activity, osteoclast activity, etc.) mediated by inflammatory processes.

Another category of tissue regeneration activity that may be attributable to the
25 protein of the present invention is tendon/ligament formation. A protein of the present invention, which induces tendon/ligament-like tissue or other tissue formation in circumstances where such tissue is not normally formed, has application in the healing of tendon or ligament tears, deformities and other tendon or ligament defects in humans and other animals. Such a preparation employing a tendon/ligament-like tissue inducing protein
30 may have prophylactic use in preventing damage to tendon or ligament tissue, as well as use in the improved fixation of tendon or ligament to bone or other tissues, and in repairing defects to tendon or ligament tissue. *De novo* tendon/ligament-like tissue formation induced by a composition of the present invention contributes to the repair of congenital, trauma induced, or other tendon or ligament defects of other origin, and is also useful in cosmetic

plastic surgery for attachment or repair of tendons or ligaments. The compositions of the present invention may provide an environment to attract tendon- or ligament-forming cells, stimulate growth of tendon- or ligament-forming cells, induce differentiation of progenitors of tendon- or ligament-forming cells, or induce growth of tendon/ligament cells or
5 progenitors *ex vivo* for return *in vivo* to effect tissue repair. The compositions of the invention may also be useful in the treatment of tendinitis, carpal tunnel syndrome and other tendon or ligament defects. The compositions may also include an appropriate matrix and/or sequestering agent as a carrier as is well known in the art.

The protein of the present invention may also be useful for proliferation of neural
10 cells and for regeneration of nerve and brain tissue, *i.e.* for the treatment of central and peripheral nervous system diseases and neuropathies, as well as mechanical and traumatic disorders, which involve degeneration, death or trauma to neural cells or nerve tissue. More specifically, a protein may be used in the treatment of diseases of the peripheral nervous system, such as peripheral nerve injuries, peripheral neuropathy and localized
15 neuropathies, and central nervous system diseases, such as Alzheimer's, Parkinson's disease, Huntington's disease, amyotrophic lateral sclerosis, and Shy-Drager syndrome. Further conditions which may be treated in accordance with the present invention include mechanical and traumatic disorders, such as spinal cord disorders, head trauma and cerebrovascular diseases such as stroke. Peripheral neuropathies resulting from
20 chemotherapy or other medical therapies may also be treatable using a protein of the invention.

Proteins of the invention may also be useful to promote better or faster closure of non-healing wounds, including without limitation pressure ulcers, ulcers associated with vascular insufficiency, surgical and traumatic wounds, and the like.

25 It is expected that a protein of the present invention may also exhibit activity for generation or regeneration of other tissues, such as organs (including, for example, pancreas, liver, intestine, kidney, skin, endothelium), muscle (smooth, skeletal or cardiac) and vascular (including vascular endothelium) tissue, or for promoting the growth of cells comprising such tissues. Part of the desired effects may be by inhibition or modulation of
30 fibrotic scarring to allow normal tissue to regenerate. A protein of the invention may also exhibit angiogenic activity.

A protein of the present invention may also be useful for gut protection or regeneration and treatment of lung or liver fibrosis, reperfusion injury in various tissues, and conditions resulting from systemic cytokine damage.

A protein of the present invention may also be useful for promoting or inhibiting differentiation of tissues described above from precursor tissues or cells; or for inhibiting the growth of tissues described above.

The activity of a protein of the invention may, among other means, be measured
5 by the following methods:

Assays for tissue generation activity include, without limitation, those described in: International Patent Publication No. WO95/16035 (bone, cartilage, tendon); International Patent Publication No. WO95/05846 (nerve, neuronal); International Patent Publication No. WO91/07491 (skin, endothelium).

10 Assays for wound healing activity include, without limitation, those described in: Winter, Epidermal Wound Healing, pps. 71-112 (Maibach, HI and Rovee, DT, eds.), Year Book Medical Publishers, Inc., Chicago, as modified by Eaglstein and Mertz, J. Invest. Dermatol 71:382-84 (1978).

15 Activin/Inhibin Activity

A protein of the present invention may also exhibit activin- or inhibin-related activities. Inhibins are characterized by their ability to inhibit the release of follicle stimulating hormone (FSH), while activins are characterized by their ability to stimulate the release of follicle stimulating hormone (FSH). Thus, a protein of the present invention,
20 alone or in heterodimers with a member of the inhibin α family, may be useful as a contraceptive based on the ability of inhibins to decrease fertility in female mammals and decrease spermatogenesis in male mammals. Administration of sufficient amounts of other inhibins can induce infertility in these mammals. Alternatively, the protein of the invention, as a homodimer or as a heterodimer with other protein subunits of the inhibin- β group, may
25 be useful as a fertility inducing therapeutic, based upon the ability of activin molecules in stimulating FSH release from cells of the anterior pituitary. See, for example, United States Patent 4,798,885. A protein of the invention may also be useful for advancement of the onset of fertility in sexually immature mammals, so as to increase the lifetime reproductive performance of domestic animals such as cows, sheep and pigs.

30 The activity of a protein of the invention may, among other means, be measured by the following methods:

Assays for activin/inhibin activity include, without limitation, those described in: Vale et al., Endocrinology 91:562-572, 1972; Ling et al., Nature 321:779-782, 1986; Vale

et al., Nature 321:776-779, 1986; Mason et al., Nature 318:659-663, 1985; Forage et al., Proc. Natl. Acad. Sci. USA 83:3091-3095, 1986.

Chemotactic/Chemokinetic Activity

5 A protein of the present invention may have chemotactic or chemokinetic activity (e.g., act as a chemokine) for mammalian cells, including, for example, monocytes, fibroblasts, neutrophils, T-cells, mast cells, eosinophils, epithelial and/or endothelial cells. Chemotactic and chemokinetic proteins can be used to mobilize or attract a desired cell population to a desired site of action. Chemotactic or chemokinetic proteins provide
10 particular advantages in treatment of wounds and other trauma to tissues, as well as in treatment of localized infections. For example, attraction of lymphocytes, monocytes or neutrophils to tumors or sites of infection may result in improved immune responses against the tumor or infecting agent.

15 A protein or peptide has chemotactic activity for a particular cell population if it can stimulate, directly or indirectly, the directed orientation or movement of such cell population. Preferably, the protein or peptide has the ability to directly stimulate directed movement of cells. Whether a particular protein has chemotactic activity for a population of cells can be readily determined by employing such protein or peptide in any known assay for cell chemotaxis.

20 The activity of a protein of the invention may, among other means, be measured by the following methods:

Assays for chemotactic activity (which will identify proteins that induce or prevent chemotaxis) consist of assays that measure the ability of a protein to induce the migration of cells across a membrane as well as the ability of a protein to induce the adhesion of one
25 cell population to another cell population. Suitable assays for movement and adhesion include, without limitation, those described in: Current Protocols in Immunology, Ed by J.E. Coligan, A.M. Kruisbeek, D.H. Margulies, E.M. Shevach, W. Strober, Pub. Greene Publishing Associates and Wiley-Interscience (Chapter 6.12, Measurement of alpha and beta Chemokines 6.12.1-6.12.28; Taub et al. J. Clin. Invest. 95:1370-1376, 1995; Lind et al. APMIS 103:140-146, 1995; Muller et al Eur. J. Immunol. 25: 1744-1748; Gruber et al.
30 J. of Immunol. 152:5860-5867, 1994; Johnston et al. J. of Immunol. 153: 1762-1768, 1994.

Hemostatic and Thrombolytic Activity

A protein of the invention may also exhibit hemostatic or thrombolytic activity. As a result, such a protein is expected to be useful in treatment of various coagulation disorders (including hereditary disorders, such as hemophilias) or to enhance coagulation and other hemostatic events in treating wounds resulting from trauma, surgery or other causes. A
5 protein of the invention may also be useful for dissolving or inhibiting formation of thromboses and for treatment and prevention of conditions resulting therefrom (such as, for example, infarction of cardiac and central nervous system vessels (e.g., stroke).

The activity of a protein of the invention may, among other means, be measured by the following methods:

10 Assay for hemostatic and thrombolytic activity include, without limitation, those described in: Linet et al., J. Clin. Pharmacol. 26:131-140, 1986; Burdick et al., Thrombosis Res. 45:413-419, 1987; Humphrey et al., Fibrinolysis 5:71-79 (1991); Schaub, Prostaglandins 35:467-474, 1988.

15 Receptor/Ligand Activity

A protein of the present invention may also demonstrate activity as receptors, receptor ligands or inhibitors or agonists of receptor/ligand interactions. Examples of such receptors and ligands include, without limitation, cytokine receptors and their ligands, receptor kinases and their ligands, receptor phosphatases and their ligands, receptors
20 involved in cell-cell interactions and their ligands (including without limitation, cellular adhesion molecules (such as selectins, integrins and their ligands) and receptor/ligand pairs involved in antigen presentation, antigen recognition and development of cellular and humoral immune responses). Receptors and ligands are also useful for screening of potential peptide or small molecule inhibitors of the relevant receptor/ligand interaction.
25 A protein of the present invention (including, without limitation, fragments of receptors and ligands) may themselves be useful as inhibitors of receptor/ligand interactions.

The activity of a protein of the invention may, among other means, be measured by the following methods:

Suitable assays for receptor-ligand activity include without limitation those
30 described in: Current Protocols in Immunology, Ed by J.E. Coligan, A.M. Kruisbeek, D.H. Margulies, E.M. Shevach, W. Strober, Pub. Greene Publishing Associates and Wiley-Interscience (Chapter 7.28, Measurement of Cellular Adhesion under static conditions 7.28.1-7.28.22), Takai et al., Proc. Natl. Acad. Sci. USA 84:6864-6868, 1987; Bierer et al., J. Exp. Med. 168:1145-1156, 1988; Rosenstein et al., J. Exp. Med.

169:149-160 1989; Stoltenborg et al., J. Immunol. Methods 175:59-68, 1994; Stitt et al., Cell 80:661-670, 1995.

Anti-Inflammatory Activity

5 Proteins of the present invention may also exhibit anti-inflammatory activity. The anti-inflammatory activity may be achieved by providing a stimulus to cells involved in the inflammatory response, by inhibiting or promoting cell-cell interactions (such as, for example, cell adhesion), by inhibiting or promoting chemotaxis of cells involved in the inflammatory process, inhibiting or promoting cell extravasation, or by stimulating or
10 suppressing production of other factors which more directly inhibit or promote an inflammatory response. Proteins exhibiting such activities can be used to treat inflammatory conditions including chronic or acute conditions), including without limitation inflammation associated with infection (such as septic shock, sepsis or systemic inflammatory response syndrome (SIRS)), ischemia-reperfusion injury, endotoxin lethality,
15 arthritis, complement-mediated hyperacute rejection, nephritis, cytokine or chemokine-induced lung injury, inflammatory bowel disease, Crohn's disease or resulting from over production of cytokines such as TNF or IL-1. Proteins of the invention may also be useful to treat anaphylaxis and hypersensitivity to an antigenic substance or material.

20. Tumor Inhibition Activity

In addition to the activities described above for immunological treatment or prevention of tumors, a protein of the invention may exhibit other anti-tumor activities. A protein may inhibit tumor growth directly or indirectly (such as, for example, via ADCC). A protein may exhibit its tumor inhibitory activity by acting on tumor tissue or tumor
25 precursor tissue, by inhibiting formation of tissues necessary to support tumor growth (such as, for example, by inhibiting angiogenesis), by causing production of other factors, agents or cell types which inhibit tumor growth, or by suppressing, eliminating or inhibiting factors, agents or cell types which promote tumor growth.

30

Other Activities

A protein of the invention may also exhibit one or more of the following additional activities or effects: inhibiting the growth, infection or function of, or killing, infectious agents, including, without limitation, bacteria, viruses, fungi and other parasites; effecting

(suppressing or enhancing) bodily characteristics, including, without limitation, height, weight, hair color, eye color, skin, fat to lean ratio or other tissue pigmentation, or organ or body part size or shape (such as, for example, breast augmentation or diminution, change in bone form or shape); effecting biorhythms or circadian cycles or rhythms; effecting the
5 fertility of male or female subjects; effecting the metabolism, catabolism, anabolism, processing, utilization, storage or elimination of dietary fat, lipid, protein, carbohydrate, vitamins, minerals, cofactors or other nutritional factors or component(s); effecting behavioral characteristics, including, without limitation, appetite, libido, stress, cognition (including cognitive disorders), depression (including depressive disorders) and violent
10 behaviors; providing analgesic effects or other pain reducing effects; promoting differentiation and growth of embryonic stem cells in lineages other than hematopoietic lineages; hormonal or endocrine activity; in the case of enzymes, correcting deficiencies of the enzyme and treating deficiency-related diseases; treatment of hyperproliferative disorders (such as, for example, psoriasis); immunoglobulin-like activity (such as, for
15 example, the ability to bind antigens or complement); and the ability to act as an antigen in a vaccine composition to raise an immune response against such protein or another material or entity which is cross-reactive with such protein.

20

ADMINISTRATION AND DOSING

A protein of the present invention (from whatever source derived, including without limitation from recombinant and non-recombinant sources) may be used in a pharmaceutical composition when combined with a pharmaceutically acceptable carrier. Such a composition may also contain (in addition to protein and a carrier) diluents, fillers, salts, buffers, stabilizers, solubilizers, and other materials well known in the art. The term "pharmaceutically acceptable" means a non-toxic material that does not interfere with the effectiveness of the biological activity of the active ingredient(s). The characteristics of the carrier will depend on the route of administration. The pharmaceutical composition of the invention may also contain cytokines, lymphokines, or other hematopoietic factors such as M-CSF, GM-CSF, TNF, IL-1, IL-2, IL-3, IL-4, IL-5, IL-6, IL-7, IL-8, IL-9, IL-10, IL-11, IL-12, IL-13, IL-14, IL-15, IFN, TNF0, TNF1, TNF2, G-CSF, Meg-CSF, thrombopoietin, stem cell factor, and erythropoietin. The pharmaceutical composition may further contain other agents which either enhance the activity of the protein or compliment its activity or use in treatment. Such additional factors and/or agents may be included in the pharmaceutical composition to produce a synergistic effect with protein of the invention, or to minimize side effects. Conversely, protein of the present invention may be included in formulations of the particular cytokine, lymphokine, other hematopoietic factor, thrombolytic or anti-thrombotic factor, or anti-inflammatory agent to minimize side effects of the cytokine, lymphokine, other hematopoietic factor, thrombolytic or anti-thrombotic factor, or anti-inflammatory agent.

A protein of the present invention may be active in multimers (e.g., heterodimers or homodimers) or complexes with itself or other proteins. As a result, pharmaceutical compositions of the invention may comprise a protein of the invention in such multimeric or complexed form.

The pharmaceutical composition of the invention may be in the form of a complex of the protein(s) of present invention along with protein or peptide antigens. The protein and/or peptide antigen will deliver a stimulatory signal to both B and T lymphocytes. B lymphocytes will respond to antigen through their surface immunoglobulin receptor. T lymphocytes will respond to antigen through the T cell receptor (TCR) following presentation of the antigen by MHC proteins. MHC and structurally related proteins including those encoded by class I and class II MHC genes on host cells will serve to present the peptide antigen(s) to T lymphocytes. The antigen components could also be supplied as purified MHC-peptide complexes alone or with co-stimulatory molecules that

can directly signal T cells. Alternatively antibodies able to bind surface immunoglobulin and other molecules on B cells as well as antibodies able to bind the TCR and other molecules on T cells can be combined with the pharmaceutical composition of the invention.

5 The pharmaceutical composition of the invention may be in the form of a liposome in which protein of the present invention is combined, in addition to other pharmaceutically acceptable carriers, with amphipathic agents such as lipids which exist in aggregated form as micelles, insoluble monolayers, liquid crystals, or lamellar layers in aqueous solution. Suitable lipids for liposomal formulation include, without limitation, monoglycerides,
10 diglycerides, sulfatides, lysolecithin, phospholipids, saponin, bile acids, and the like. Preparation of such liposomal formulations is within the level of skill in the art, as disclosed, for example, in U.S. Patent No. 4,235,871; U.S. Patent No. 4,501,728; U.S. Patent No. 4,837,028; and U.S. Patent No. 4,737,323, all of which are incorporated herein by reference.

15 As used herein, the term "therapeutically effective amount" means the total amount of each active component of the pharmaceutical composition or method that is sufficient to show a meaningful patient benefit, i.e., treatment, healing, prevention or amelioration of the relevant medical condition, or an increase in rate of treatment, healing, prevention or amelioration of such conditions. When applied to an individual active ingredient,
20 administered alone, the term refers to that ingredient alone. When applied to a combination, the term refers to combined amounts of the active ingredients that result in the therapeutic effect, whether administered in combination, serially or simultaneously.

 In practicing the method of treatment or use of the present invention, a therapeutically effective amount of protein of the present invention is administered to a
25 mammal having a condition to be treated. Protein of the present invention may be administered in accordance with the method of the invention either alone or in combination with other therapies such as treatments employing cytokines, lymphokines or other hematopoietic factors. When co-administered with one or more cytokines, lymphokines or other hematopoietic factors, protein of the present invention may be administered either
30 simultaneously with the cytokine(s), lymphokine(s), other hematopoietic factor(s), thrombolytic or anti-thrombotic factors, or sequentially. If administered sequentially, the attending physician will decide on the appropriate sequence of administering protein of the present invention in combination with cytokine(s), lymphokine(s), other hematopoietic factor(s), thrombolytic or anti-thrombotic factors.

Administration of protein of the present invention used in the pharmaceutical composition or to practice the method of the present invention can be carried out in a variety of conventional ways, such as oral ingestion, inhalation, topical application or cutaneous, subcutaneous, intraperitoneal, parenteral or intravenous injection. Intravenous
5 administration to the patient is preferred.

When a therapeutically effective amount of protein of the present invention is administered orally, protein of the present invention will be in the form of a tablet, capsule, powder, solution or elixir. When administered in tablet form, the pharmaceutical composition of the invention may additionally contain a solid carrier such as a gelatin or an
10 adjuvant. The tablet, capsule, and powder contain from about 5 to 95% protein of the present invention, and preferably from about 25 to 90% protein of the present invention. When administered in liquid form, a liquid carrier such as water, petroleum, oils of animal or plant origin such as peanut oil, mineral oil, soybean oil, or sesame oil, or synthetic oils may be added. The liquid form of the pharmaceutical composition may further contain
15 physiological saline solution, dextrose or other saccharide solution, or glycols such as ethylene glycol, propylene glycol or polyethylene glycol. When administered in liquid form, the pharmaceutical composition contains from about 0.5 to 90% by weight of protein of the present invention, and preferably from about 1 to 50% protein of the present invention.

20 When a therapeutically effective amount of protein of the present invention is administered by intravenous, cutaneous or subcutaneous injection, protein of the present invention will be in the form of a pyrogen-free, parenterally acceptable aqueous solution. The preparation of such parenterally acceptable protein solutions, having due regard to pH, isotonicity, stability, and the like, is within the skill in the art. A preferred pharmaceutical
25 composition for intravenous, cutaneous, or subcutaneous injection should contain, in addition to protein of the present invention, an isotonic vehicle such as Sodium Chloride Injection, Ringer's Injection, Dextrose Injection, Dextrose and Sodium Chloride Injection, Lactated Ringer's Injection, or other vehicle as known in the art. The pharmaceutical composition of the present invention may also contain stabilizers, preservatives, buffers,
30 antioxidants, or other additives known to those of skill in the art.

The amount of protein of the present invention in the pharmaceutical composition of the present invention will depend upon the nature and severity of the condition being treated, and on the nature of prior treatments which the patient has undergone. Ultimately, the attending physician will decide the amount of protein of the present invention with

which to treat each individual patient. Initially, the attending physician will administer low doses of protein of the present invention and observe the patient's response. Larger doses of protein of the present invention may be administered until the optimal therapeutic effect is obtained for the patient, and at that point the dosage is not increased further. It is contemplated that the various pharmaceutical compositions used to practice the method of the present invention should contain about 0.01 μ g to about 100 mg (preferably about 0.1 mg to about 10 mg, more preferably about 0.1 μ g to about 1 mg) of protein of the present invention per kg body weight.

The duration of intravenous therapy using the pharmaceutical composition of the present invention will vary, depending on the severity of the disease being treated and the condition and potential idiosyncratic response of each individual patient. It is contemplated that the duration of each application of the protein of the present invention will be in the range of 12 to 24 hours of continuous intravenous administration. Ultimately the attending physician will decide on the appropriate duration of intravenous therapy using the pharmaceutical composition of the present invention.

Protein of the invention may also be used to immunize animals to obtain polyclonal and monoclonal antibodies which specifically react with the protein. Such antibodies may be obtained using either the entire protein or fragments thereof as an immunogen. The peptide immunogens additionally may contain a cysteine residue at the carboxyl terminus, and are conjugated to a hapten such as keyhole limpet hemocyanin (KLH). Methods for synthesizing such peptides are known in the art, for example, as in R.P. Merrifield, J. Amer.Chem.Soc. 85, 2149-2154 (1963); J.L. Krstenansky, *et al.*, FEBS Lett. 211, 10 (1987). Monoclonal antibodies binding to the protein of the invention may be useful diagnostic agents for the immunodetection of the protein. Neutralizing monoclonal antibodies binding to the protein may also be useful therapeutics for both conditions associated with the protein and also in the treatment of some forms of cancer where abnormal expression of the protein is involved. In the case of cancerous cells or leukemic cells, neutralizing monoclonal antibodies against the protein may be useful in detecting and preventing the metastatic spread of the cancerous cells, which may be mediated by the protein.

For compositions of the present invention which are useful for bone, cartilage, tendon or ligament regeneration, the therapeutic method includes administering the composition topically, systematically, or locally as an implant or device. When administered, the therapeutic composition for use in this invention is, of course, in a

pyrogen-free, physiologically acceptable form. Further, the composition may desirably be encapsulated or injected in a viscous form for delivery to the site of bone, cartilage or tissue damage. Topical administration may be suitable for wound healing and tissue repair. Therapeutically useful agents other than a protein of the invention which may also
5 optionally be included in the composition as described above, may alternatively or additionally, be administered simultaneously or sequentially with the composition in the methods of the invention. Preferably for bone and/or cartilage formation, the composition would include a matrix capable of delivering the protein-containing composition to the site of bone and/or cartilage damage, providing a structure for the developing bone and
10 cartilage and optimally capable of being resorbed into the body. Such matrices may be formed of materials presently in use for other implanted medical applications.

The choice of matrix material is based on biocompatibility, biodegradability, mechanical properties, cosmetic appearance and interface properties. The particular application of the compositions will define the appropriate formulation. Potential matrices
15 for the compositions may be biodegradable and chemically defined calcium sulfate, tricalciumphosphate, hydroxyapatite, polylactic acid, polyglycolic acid and polyanhydrides. Other potential materials are biodegradable and biologically well-defined, such as bone or dermal collagen. Further matrices are comprised of pure proteins or extracellular matrix components. Other potential matrices are nonbiodegradable and chemically defined, such
20 as sintered hydroxapatite, bioglass, aluminates, or other ceramics. Matrices may be comprised of combinations of any of the above mentioned types of material, such as polylactic acid and hydroxyapatite or collagen and tricalciumphosphate. The bioceramics may be altered in composition, such as in calcium-aluminate-phosphate and processing to alter pore size, particle size, particle shape, and biodegradability.

25 Presently preferred is a 50:50 (mole weight) copolymer of lactic acid and glycolic acid in the form of porous particles having diameters ranging from 150 to 800 microns. In some applications, it will be useful to utilize a sequestering agent, such as carboxymethyl cellulose or autologous blood clot, to prevent the protein compositions from disassociating from the matrix.

30 A preferred family of sequestering agents is cellulosic materials such as alkylcelluloses (including hydroxyalkylcelluloses), including methylcellulose, ethylcellulose, hydroxyethylcellulose, hydroxypropylcellulose, hydroxypropyl-methylcellulose, and carboxymethylcellulose, the most preferred being cationic salts of carboxymethylcellulose (CMC). Other preferred sequestering agents include hyaluronic acid, sodium alginate,

poly(ethylene glycol), polyoxyethylene oxide, carboxyvinyl polymer and poly(vinyl alcohol). The amount of sequestering agent useful herein is 0.5-20 wt%, preferably 1-10 wt% based on total formulation weight, which represents the amount necessary to prevent desorption of the protein from the polymer matrix and to provide appropriate handling of the composition, yet not so much that the progenitor cells are prevented from infiltrating the matrix, thereby providing the protein the opportunity to assist the osteogenic activity of the progenitor cells.

In further compositions, proteins of the invention may be combined with other agents beneficial to the treatment of the bone and/or cartilage defect, wound, or tissue in question. These agents include various growth factors such as epidermal growth factor (EGF), platelet derived growth factor (PDGF), transforming growth factors (TGF- α and TGF- β), and insulin-like growth factor (IGF).

The therapeutic compositions are also presently valuable for veterinary applications. Particularly domestic animals and thoroughbred horses, in addition to humans, are desired patients for such treatment with proteins of the present invention.

The dosage regimen of a protein-containing pharmaceutical composition to be used in tissue regeneration will be determined by the attending physician considering various factors which modify the action of the proteins, e.g., amount of tissue weight desired to be formed, the site of damage, the condition of the damaged tissue, the size of a wound, type of damaged tissue (e.g., bone), the patient's age, sex, and diet, the severity of any infection, time of administration and other clinical factors. The dosage may vary with the type of matrix used in the reconstitution and with inclusion of other proteins in the pharmaceutical composition. For example, the addition of other known growth factors, such as IGF I (insulin like growth factor I), to the final composition, may also effect the dosage. Progress can be monitored by periodic assessment of tissue/bone growth and/or repair, for example, X-rays, histomorphometric determinations and tetracycline labeling.

Polynucleotides of the present invention can also be used for gene therapy. Such polynucleotides can be introduced either *in vivo* or *ex vivo* into cells for expression in a mammalian subject. Polynucleotides of the invention may also be administered by other known methods for introduction of nucleic acid into a cell or organism (including, without limitation, in the form of viral vectors or naked DNA).

Cells may also be cultured *ex vivo* in the presence of proteins of the present invention in order to proliferate or to produce a desired effect on or activity in such cells. Treated cells can then be introduced *in vivo* for therapeutic purposes.

Patent and literature references cited herein are incorporated by reference as if fully set forth.

Table 3

Sel.	Species	Tissue	Cell Type
AA	Human	Kidney	19-23wks., M/F pool of 5
AB	Human	Fetal Lung	Fetal Lung
AC	Human	Placenta	26yrs., 1 specimen
AD	Murine	Embryo	Fetal ES cells
AE	Murine	Spleen	Adult spleen
AF	Murine	Fetal Brain	Fetal Brain
AG	Murine	Fetal Brain	Fetal Brain
AH	Murine	Fetal Thymus	Fetal Thymus
AI	Human	Blood	Adult PBMC/TH1or2
AJ	Human	Testes	10-61yrs., pool of 11
AK	Human	Kidney	19-23wks., M/F pool of 5
AL	Human	Neural	Adult Glioblastoma line TG-1
AM	Human	Kidney	19-23wks., M/F pool of 5
AN	Murine	Bone Marrow	Adult Stromal cell line FCM-4
AO	Murine	Thymus	Adult Subtr. Adult Thymus
AP	Human	Placenta	26yrs., 1 specimen
AQ	Human	Ovary	PA-1 Teratocarcinoma
AR	Human	Retina	16-75yrs., pool of 76
AS	Human	Brain	19-23wks., M/F pool of 5
AT	Human	Blood	Adult lymphocytes+dend. cells
AU	Human	Testes	10-61yrs., pool of 11
AV	Murine	Spleen	Adult spleen
AW	Human	Ovary	PA-1 Teratocarcinoma
AX	Human	Testes	10-61yrs., pool of 11
AY	Human	Retina	16-75yrs., pool of 76
AZ	Human	Colon	Caco-2 Adenocarcinoma
B	Human	Blood	PeripheralBloodMononuclearCell
BA	Human	Placenta	26yrs., 1 specimen
BB	Human	Blood	Adult PBMC/TH1or2
BC	Murine	Embryo	Fetal ES cells
BD	Human	Kidney	19-23wks., M/F pool of 5
BE	Human	Blood	Adult PBMC/TH1or2
BF	Human	Brain	19-23wks., M/F pool of 5
BG	Human	Brain	N/A
BH	Human	Ovary	PA-1 Teratocarcinoma
BI	Human	Kidney	19-23wks., M/F pool of 5
BJ	Human	Ovary	PA-1 Teratocarcinoma
BK	Human	Retina	16-75yrs., pool of 76
BL	Human	Testes	10-61yrs., pool of 11
BM	Human	Muscle	N/A
BN	Human	Placenta	26yrs., 1 specimen
BO	Human	Retina	16-75yrs., pool of 76
BP	Human	Kidney	19-23wks., M/F pool of 5
BQ	Human	Colon	Caco-2 Adenocarcinoma Caco2

BR	Human	Kidney	19-23wks., M/F pool of 5
BS	Human	Pituitary	Adult Pituitary
BT	Human	Blood	Adult PBMC
BU	Human	Placenta	26yrs., 1 specimen
BV	Human	Brain	N/A
BW	Human	Blood	Adult PBMC
BX	Human	Ovary	PA-1 Teratocarcinoma
BY	Human	Blood	Adult PBMC/TH1or2
BZ	Human	Kidney	19-23wks., M/F pool of 5
C	Human	Blood	PeripheralBloodMononuclearCell
CA	Murine	Embryo	Fetal ES cell embryoid bodies
CB	Human	Brain	19-23wks., M/F pool of 5
CC	Human	Brain	N/A
CD	Human	Brain	19-23wks., M/F pool of 5
CE	Human	Blood	Adult lymphocytes+dend. cells
CF	Human	Placenta	26yrs., 1 specimen
CG	Human	Testes	10-61yrs., pool of 11
CH	Human	Kidney	19-23wks., M/F pool of 5
CI	Human	Brain	N/A
CJ	Human	Brain	19-23wks., M/F pool of 5
CK	Human	Testes	10-61yrs., pool of 11
CL	Human	Retina	16-75yrs., pool of 76
CM	Human	Adult Lung	Adult Lung
CN	Human	Brain	19-23wks., M/F pool of 5
CO	Human	Brain	N/A
CP	Human	SalivaryGland	N/A
CQ	Human	Heart	13-73yrs., pool of 3
CR	Human	Testes	10-61yrs., pool of 11
CS	Human	Brain	19-23wks., M/F pool of 5
CT	Human	Brain	N/A
CU	Human	Pineal Gland	N/A
CV	Human	Mammary	Adult Human Mammary
CW	Human	Brain	19-23wks., M/F pool of 5
CY	Human	Pineal Gland	N/A
CZ	Human	Testes	10-61yrs., pool of 11
D	Human	Blood	PeripheralBloodMononuclearCell
DA	Human	Placenta	26yrs., 1 specimen
DB	Human	Prostate	Adult Prostate
DC	Human	Pineal Gland	Adult Pineal Gland
DD	Human	Testes	10-61yrs., pool of 11
DE	Human	Testes	Adult NCCIT TeratoCA
DF	Human	Brain	N/A
DG	Human	Placenta	26yrs., 1 specimen
DH	Human	Brain	19-23wks., M/F pool of 5
DI	Human	Testes	10-61yrs., pool of 11
DJ	Human	Placenta	26yrs., 1 specimen
DK	Human	Fetal Kidney2	Fetal Kidney

DL	Human	Brain	N/A
DM	Human	Brain	N/A
DN	Human	Brain	19-23wks., M/F pool of 5
DO	Human	Testes	10-61yrs., pool of 11
DP	Murine	Embryo	Fetal ES cell embryoid bodies
DQ	Human	Placenta	26yrs., 1 specimen
DR	Human	SalivaryGland	N/A
DT	Human	Brain	N/A
DU	Human	Brain	19-23wks., M/F pool of 5
DV	Human	Pineal Gland	Adult Pineal Gland
DW	Human	Brain	N/A
DX	Human	Testes	10-61yrs., pool of 11
DY	Human	Brain	N/A
DZ	Human	Testes	Adult NCCIT TeratoCA
E	Human	Blood	PeripheralBloodMononuclearCell
EA	Human	Brain	19-23wks., M/F pool of 5
EB	Human	Melanoma	Adult Melanoma
EC	Human	Brain	N/A
ED	Human	Placenta	26yrs., 1 specimen
EE	Human	Testes	10-61yrs., pool of 11
EF	Human	Liver	Adult Liver
EG	Human	Pancreas	Adult HPC-3 Ductal AdenoCA
EH	Human	Blood	PeripheralBloodMononuclearCell
EI	Human	Brain	19-23wks., M/F pool of 5
EJ	Human	Placenta	26yrs., 1 specimen
EK	Human	Brain	19-23wks., M/F pool of 5
EL	Human	Testes	10-61yrs., pool of 11
EM	Human	Fetal Kidney2	Fetal Kidney
EN	Human	Brain	19-23wks., M/F pool of 5
EO	Human	Adrenal Gland	Adult Adrenal Gland
EP	Human	Placenta	26yrs., 1 specimen
EQ	Human	Testes	10-61yrs., pool of 11
ER	Human	Brain	19-23wks., M/F pool of 5
ES	Human	Placenta	26yrs., 1 specimen
ET	Human	Testes	10-61yrs., pool of 11
EU	Human	Kidney	Adult Kidney
EV	Human	Stomach	Adult Stomach
EW	Human	Placenta	26yrs., 1 specimen
EX	Human	Testes	10-61yrs., pool of 11
EY	Human	Brain	19-23wks., M/F pool of 5
EZ	Human	Fetal Kidney2	Fetal Kidney
FA	Human	Brain	19-23wks., M/F pool of 5
FB	Human	Placenta	26yrs., 1 specimen
FC	Human	Testes	10-61yrs., pool of 11
FD	Human	SalivaryGland	N/A
FE	Human	Brain	N/A
FF	Human	Testes	Adult NCCIT TeratoCA

FG	Human	Brain	N/A
FH	Human	Brain	19-23wks., M/F pool of 5
FI	Human	Small Intest	Adult Small Intestine
FJ	Human	Lung CA	Adult Lung CA
FK	Human	Kidney	Adult Kidney
FM	Human	Brain	N/A
FN	Human	Brain	19-23wks., M/F pool of 5
FO	Human	Brain	N/A
FP	Human	Placenta	26yrs., 1 specimen
FQ	Human	Testes	10-61yrs., pool of 11
FR	Human	Placenta	26yrs., 1 specimen
FS	Human	Testes	10-61yrs., pool of 11
FT	Chicken	Fetal Lung	Fetal Lung
FU	Chicken	Limb Bud	Fetal St. 23 Limb Bud
FV	Human	Testes	Adult NCCIT TeratoCA
FW	Human	Testes	Adult NCCIT TeratoCA
FX	Human	Brain	19-23wks., M/F pool of 5
FY	Human	Placenta	26yrs., 1 specimen
FZ	Human	Placenta	26yrs., 1 specimen
G	Human	Blood	PeripheralBloodMononuclearCell
GA	Human	Testes	10-61yrs., pool of 11
GB	Human	Placenta	26yrs., 1 specimen
GC	Human	Testes	10-61yrs., pool of 11
GD	Human	Placenta	26yrs., 1 specimen
GE	Human	Brain	N/A
GF	Human	Brain	19-23wks., M/F pool of 5
GG	Human	Fetal Kidney2	Fetal Kidney
GH	Human	Placenta	26yrs., 1 specimen
GI	Human	Retinoblastoma	Adult Retinoblastoma Y79
GJ	Murine	Spleen	Adult Spleen
GK	Human	Fetal Kidney2	Fetal Kidney
GL	Murine	Lymph Node	Adult Lymph Node
GM	Human	Uterus	N/A
GN	Human	Blood	PeripheralBloodMononuclearCell
GO	Human	Adrenal Gland	Adult Adrenal Gland
GP	Human	Ovary	PA-1 Teratocarcinoma
GQ	Human	Pineal Gland	N/A
GR	Human	Pancreas	Adult HPC-3 Ductal AdenoCA
GS	Human	Retina	16-75yrs., pool of 76
GT	Human	Brain	N/A
GU	Human	Fetal Kidney2	Fetal Kidney
GV	Rat	Retina	Newborn Retina
GW	Chicken	Limb Bud	Fetal St.26 Limb Bud
GX	Human	Brain	N/A
GY	Human	Testes	10-61yrs., pool of 11
GZ	Human	Brain	19-23wks., M/F pool of 5
H	Human	Blood	PeripheralBloodMononuclearCell

HA	Human	Testes	Adult NCCIT TeratoCA
HB	Human	Fetal Kidney2	Fetal Kidney
HC	Human	Brain	19-23wks., M/F pool of 5
HD	Human	Brain	N/A
HE	Human	Testes	10-61yrs., pool of 11
HF	Human	Brain	19-23wks., M/F pool of 5
HG	Human	Fetal Kidney2	Fetal Kidney
HH	Human	Brain	N/A
HI	Human	Testes	10-61yrs., pool of 11
HJ	Human	Brain	N/A
HK	Human	Brain	19-23wks., M/F pool of 5
HL	Human	Fetal Kidney2	Fetal Kidney
HM	Human	Testes	Adult NCCIT TeratoCA
HN	Human	Fetal Kidney2	Fetal Kidney
HO	Human	Brain	N/A
HP	Human	Brain	19-23wks., M/F pool of 5
HQ	Human	Testes	10-61yrs., pool of 11
HR	Human	Brain	N/A
HS	Human	Brain	N/A
HT	Human	Brain	19-23wks., M/F pool of 5
HU	Human	Fetal Kidney2	Fetal Kidney
HV	Human	Testes	10-61yrs., pool of 11
HW	Human	Brain	N/A
HX	Human	Brain Hippoca	Adult Brain Hippocampus
HY	Human	Trachea	Adult Trachea
HZ	Human	Brain Thalamus	Adult Brain Thalamus
I	Human	Blood	PeripheralBloodMononuclearCell
IA	Human	Thyroid	Adult Thyroid
IB	Human	Embryonal CA	Fetal NT2-D1
IC	Human	WER1-Rb1 line	Adult Retinoblastoma
ID	Human	Muscle	N/A
IE	Human	Brain	19-23wks., M/F pool of 5
IF	Human	Uterus	N/A
IG	Human	Testes	10-61yrs., pool of 11
IH	Human	Muscle	N/A
II	Human	Brain	N/A
IJ	Human	Blood	PeripheralBloodMononuclearCell
IK	Human	Retinoblastoma	Adult Retinoblastoma Y79
IL	Human	Retina	16-75yrs., pool of 76
IM	Human	Various	Various
IN	Human	Prostate	Adult Prostate
IO	Human	Brain	19-23wks., M/F pool of 5
IP	Human	Fetal Kidney2	Fetal Kidney
IQ	Human	Prostate	Adult Prostate
IR	Human	Brain Hippoca	Adult Brain Hippocampus
IS	Human	Trachea	Adult Trachea
IT	Human	Brain Thalamu	Adult Brain Thalamus

SEQUENCE LISTING

(1) GENERAL INFORMATION:

- (i) APPLICANT: Jacobs, Kenneth
McCoy, John
LaVallie, Edward
Racie, Lisa
Merberg, David
Treacy, Maurice
Spaulding, Vikki
Agostino, Michael
- (ii) TITLE OF INVENTION: SECRETED, EXPRESSED SEQUENCE TAGS
- (iii) NUMBER OF SEQUENCES: 1519
- (iv) CORRESPONDENCE ADDRESS
(A) ADDRESSE: Genetics Institute, Inc.
(B) STREET: 87 CambridgePark Drive
(C) CITY: Cambridge
(D) STATE: Massachusetts
(E) COUNTRY: U.S.A
(F) ZIP: 02140
- (v) COMPUTER READABLE FORM:
(A) MEDIUM TYPE: Floppy Disk
(B) COMPUTER: IBM PC Compatible
(C) OPERATING SYSTEM: PC-DOS/MS-DOS
(D) SOFTWARE: PatentIn Release #1.0, Version #1.30
- (vi) CURRENT APPLICATION DATA:
(A) APPLICATION NUMBER:
(B) FILING DATE:
(C) CLASSIFICATION:
- (vii) ATTORNEY/AGENT INFORMATION:
(A) NAME: Brown, Scott A.
(B) REGISTRATION NUMBER: 32,724
- (ix) TELECOMMUNICATION INFORMATION:
(A) TELEPHONE: (617) 498-8224
(B) TELEFAX: (617) 876-5851

(2) INFORMATION FOR SEQ ID NO:1:

- (i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 400 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear
- (ii) MOLECULE TYPE: cDNA
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1:

GGAGATGTTG	AGGTGGCTGC	TGACCTTGGG	TCTCATCTCC	TTGATTTTCT	TTATCTTCTT	60
CATTGCCGTC	CTCTCTAGGC	TGTCTTTGGC	GAGGAGGGCC	CCTGCGGAAT	CGTGGTCTAT	120
ATCCCCGATA	CATATTCTGC	CTCACTGGTC	TACCTTGTTT	TCCTGCACCC	TGGTTGTCAG	180
CACCCTCCAT	CACTTCTCCC	TGCACAGGAG	GGTTGGAATA	CTGTGGTCTGA	CGCCCATAGG	240

GTCTCCGCAT GTAGTAAGGT GGGAACCTTC GCCTGCGGTA GGGCCGGCGT TGTTGGGCCT	300
GGCCTTCGGG AGCACTCTCC GATCCCTCGT TCTTTTCCCC ACTCTCACTA TTCTGGTAAT	360
TTTGCTGGTA ATTGCGTGGA GGAGAACAGG TAGACTCGAG	400

(2) INFORMATION FOR SEQ ID NO:2:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 165 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:2:

GAATTAGTTG CCAGCACTTT AAAAATTGGT ATAGTTCACA TAAATATTCT GAATTCAGGC	60
TTTGGAAAA GTTGTGGACC CAAGAATACT AGGCCCGCAT TTTCTTACGT CAACATTCTT	120
TCCAGGATGA TGAATGGACT GTTCTCTTTG GCCCCTATC TCGAG	165

(2) INFORMATION FOR SEQ ID NO:3:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 299 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:3:

GAATTCTAGA CCTTCCTCTC CTA CTCCCTT CCTTAGGCTC CTGAACTCGT TTGCTCCTAA	60
ATCTTGTTAA TTCTTTTCT CTGGATTTTG GTTCTTTTG GCTTCCCTT GCCTCCCTT	120
TTCTCTGTCT CCAACACTCT TTCCCATGT CTTCTGGCT GTCTCTATGT TCCTCTCTC	180
TTATCCTCAA CTTTCTGTCC ATTCGGGCCT CCTCCCCACC TCCCACGCCC CAGCCCTCC	240
CTCCTTGGTC TCCTTTTCGA TATGCCAAAC CAATTTTGGG TCGAGTGCAT TCCCTCGAG	299

(2) INFORMATION FOR SEQ ID NO:4:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 241 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:4:

GCGATTGAAT TCTAGACCTG CCTGGATTGC CTTCTGTTGT GGTAGACAAA TCACCATTA	60
ATGACTAAGT TTCAGTGT TATGTGTTAA TGATCCTTAA TAACAAAAAG TTTTAAAGTC	120
TTAATTCGT AAGATTATGT AAAGGTTAAG AAAGAAATTT TAAGTGAAAA TGATAAAACC	180
AAGCAAATGT TTATTAGTTC AATTGTTTTT CTTTATCT TGCAGCAACG CACATCTCGA	240
G	241

(2) INFORMATION FOR SEQ ID NO:5:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 368 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:5:

GAATTCGGCC	TTCATGGCCT	AGGAAATGAC	TTTATTGTGG	TTGAATTAGT	TAAAGGGTAC	60
TTACATTACG	TGTTTGATTT	GGGAAATGGT	GCTAACCTCA	TCAAAGGAAG	CTCAAATAAA	120
CCTCTCAATG	ACAATCAGTG	GCACAACGTG	ATGATATCAA	GGGACACCAG	CAACCTCCAC	180
ACTGTAAAGA	TTGACACAAA	AATCACAACG	CAAATCACCG	CCGGAGCCAG	GAACCTTAGAC	240
CTCAAGAGTG	ACTTATATAT	AGGAGGAGTA	GCTAAAGAAA	CATACAAATC	CTTACCAAAA	300
CTTGACATG	CCAAAGAAGG	CTTCAAGGC	TGCCTGGCAT	CAGTTGATTT	AAATGGACGG	360
CTCTCGAG						368

(2) INFORMATION FOR SEQ ID NO:6:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 430 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:6:

GAATTCGGCC	TTCATGGCCT	ATAAAATTTA	AAAATGCTAA	GGATCTGGCC	CCACAGGCCC	60
CAAAGCTTTC	ACAGAGCTCC	TCTTAGACAT	GAAGATGCCC	ATTGGCCTCC	TAGGTCCCAG	120
GAGGTGTGGG	CAGGACTGCC	CTTCCTCCGT	TCTCATTGCG	GGGCTCCTGA	AGGGGGTATC	180
TGAAAAGTATG	TAAATCTGAT	GGGAGGTCTG	ATCCTCCTTT	TGCTAGCCCC	TGAACTCTGT	240
GGTGGAGTCT	GGCTGATGGC	CAGGGCCATG	TCCTAGAGGG	GACTCCCCTG	CAGGAGGCGG	300
GCTCTAAAGG	GAGTGGTGTC	CCTTTAGGCC	AGGGTTCACA	GTCCGGGGTGG	TCTGGAGACT	360
GCAGGACTCA	GGGCCTGGGG	GTGGCATCAG	TCTGGCCAGG	CCCTGCGTCA	CTTGACCCCA	420
CTGTCTCGAG						430

(2) INFORMATION FOR SEQ ID NO:7:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 391 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:7:

GGGTGGCTCA	TGCCTGTAAT	CCCGGCACTT	GGGTAGGCCA	GGGCAGCAGG	ATCGCTTGAG	60
CCCGGGAGTT	CGAGACAGCC	TGGGCAACAT	GGTGAGACCC	TGTCTCCATA	AAATTTTSTA	120
AAAAATTGCC	AGGTGTGGTC	GTGTGTGCCT	GTGAGGCTGA	GGTGGGAGGC	TCGCTTGAGC	180
CCAGGGGTCA	AGGCTGCAGT	GAGCCATGAC	TGCACGCCAC	TGCACTCCAG	CGTGGGTGAC	240
AGAGTGAGAT	ACTGTATAAA	AAAAAAAAGC	TAAAACAAAA	CAAGAAGTAT	TATCTTAAGC	300
ATGTTATTTA	GAAATATGGA	GATAAATAAA	AATAACTGAA	AGTAGGTCGT	TGCTTCTGAG	360
GAGAGAAATT	GGGAGTTGGC	AAGGTCTCGA	G			391

(2) INFORMATION FOR SEQ ID NO:8:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 351 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:8:

GCTTTTGGAG	CTGCTAAAAT	GCCGGATTAC	CTCGGTGCCG	ATCAGCGGAA	GACCAAAGAG	60
GATGAGAAGG	ACGACAAGCC	CATCCGAGCT	CTGGATGAGG	GGGATATTGC	CTTGTGAAA	120
ACTTATGGTC	AGAGCACTTA	CTCTAGGCAG	ATCAAGCAAG	TTGAAGATGA	CATTTCAGCA	180
CTTCTCAAGA	AAATTAATGA	GCTCACTGGT	ATTAAAGAAT	CTGACACTGG	CCTGGCCCCA	240
CCAGCACTCT	GGGATTTGGC	TGCAGATAAG	CAGACACTCC	AGAGTGAACA	GCCTTTACAG	300
GTTGCCAGGT	GTACAAAGAT	AATCAATGCT	GATTCCGGAGG	ACCCACTCGA	G	351

(2) INFORMATION FOR SEQ ID NO:9:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 354 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:9:

GTGATGTGTC	ACCCCAAGTG	CTCCACGTGC	TTGCCAGCCA	CCTGCGGCTT	GCCTGCTGAA	60
TATGCCACAC	ACTTCACCGA	GGCCTTCTGC	CGTGACAAA	TGAACTCCCC	AGGTCTCCAG	120
ACCAAGGAGC	CCAGCAGCAG	CTTGACCTG	GAAGGGTGGA	TGAAGGTGCC	CAGGAATAAC	180
AAACGAGGAC	AGCAAGGCTG	GGACAGGAAG	TACATTGTCC	TGGAGGGATC	AAAAGTCTCT	240
ATTTATGACA	ATGAAGCCAG	AGAAGCTGGA	CAGAGGCCCG	TGGAAGAATT	TGAGCTGTGC	300
CTTCCCGACG	GGGATGTATC	TATTCATGGT	GCCGTTGGTG	CTTCCAAACT	CGAG	354

(2) INFORMATION FOR SEQ ID NO:10:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 432 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:10:

GAATTCGGCC	TTCATGGNCT	AGGAGGAGGA	AGAGGAGTAC	GAGGATGACG	AGGGAGGAGG	60
GGGAAGACGA	GGAGGAGGAG	GAGGCTGCGG	CAGAGGCTGC	CGCGGGGGCC	AAACATGACG	120
ATGCCCACGC	CGAGATGCCT	GATGACGCCA	AGAAGTAAGG	GGGGCAGAGA	TGGATGAAGA	180
GAAAGCCAC	GAAGAAAAA	GCCTGGTTTT	GTTTTTCCCA	GAATATCGAT	GGACTTAAAA	240
AGGCTCAGGT	TTTTGACCAA	AATACAATGT	GAATTTATTC	TGACATTCCT	AAAATAGATT	300
AAATTAAAGC	AATTAGATCC	TGCCAGCTC	GATTCAAATT	TGACTTTTCT	TTTGAACATA	360
ATAAATATAT	CAAAAGGTGT	TAAAGAAAAC	TGAATTAAAC	CCAAAATTAT	GTTTTTCATG	420
TCTCTCCTCG	AG					432

(2) INFORMATION FOR SEQ ID NO:11:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 687 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:11:

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CTATTTTACA TGCCACCAG CATTGTATGG GGCTTCTCAC TTGTCCACAT GCTTGCCTGT      60
GTCATATTTG ACTTAAAGCT TATTTTGACG GGAAACCAAT TTGTCCTTTT TTGGGAAAGG      120
GATGGCACCA CAGATGTGAC GCGGACAATG CATTTTGGGA CCCCTACAGC CTACGAGAAG      180
GAATGCTTCA CATATGTCCT CAAGGGCCAC ATAGCTGTGA GTGCAGCCGT TTTCCCGACT      240
GGAACCAAAG GTCACCTTCT TGACTCCTTT GCCCGTTCAG CTTTATGGGA TTCAGGCCTA      300
GATTACTTGC ACGGGACTGG ACATGGTGTG GGTCTTTTTT TGAATGTCCA TGAAGGTCCT      360
TGCGGCATCA GTTACAAA.C ATTCTCTGAT GAGCCCTTGG AGGCAGGCAT GATTGTCACT      420
GATGAGCCCG GGTACTATGA AGATGGGGCT TTGGAATTC GCATTGAGAA TGTGTCTCTT      480
GTGGTTCCCTG TGAAGACCAA GTATAATTTT AATAACCGGG GAAGCCTGAC CTTTGAACCT      540
CTAACATTGG TTCCAATTCA GACCAAAATG ATAGATGTGG ATTCTCTTAC AGACAAAGAG      600
TGCGACTGGC TCAACAATTA CCACCTGACC TGCAGGGATG TGATTGGGAA GGAATTGCAG      660
AAACAGGGCC GCCAGGAAGC TCTCGAG                                     687

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(2) INFORMATION FOR SEQ ID NO:12:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 420 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:12:

```

GAATTCGGCC TTCATGGCCT AGTCGGTGGG TGCCTGTAGT CCCAGCTACT TGGGAGGCTG      60
AGGGAGGAGA ACTGCTTGAA CCCGGGAGGC AGAGGTTGCA GTGAGCCGAG ATTGTGCCAC      120
TGTA CTCCAG CCTGGGCCAC AAAGCAAGAA TCTGTCTCAA AAAAAAAAAA AAGAAAAGAA      180
AAGAATAAAT TTCTTTTCCC CTTGAAGAAG TTGATTTAGG CACAGACTCT GGACTCTGGA      240
TTTCCACAA TGTCTTATCT AGTCAACTCA AGTATCTGGA CTACAATTTT CTTGAAAGCA      300
AAGCCCATAT ATTAATAATC TTTACTTGTA TATAAATATT CAATAAATCA TTAAGTAAAT      360
GTGTAGAAGA ATTTTATGCT CAATAAGATC CACCCGATCA TGCATTTGAA AATTCTCGAG      420

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(2) INFORMATION FOR SEQ ID NO:13:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 379 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:13:

```

GAATTCGGCC TTCATGGCCT AGCACATACT CTGCTTTTCT GTCAACATCC CATTTTGGGG      60
AAAGGAAAAG TCATATTTAT TCCTGCACCC CAGTTTTTTA ACTTGTTCTC CCAGTTGTCC      120
CCCTCTTCTC TGGGTGTAAG AAGGGAAATT GGAAAAAAA TTATATATAT ATTCTCCTTT      180
TAATGGTGGG GGGCTACTGG AGAGGAGAGA CAGCAAGTCC ACCCTAACTT GTTACACAGC      240

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ACATACCACA GGTTCCTGGAA TTCTCATCTT CGAACCTAGA GAAATAGGTG CTATAAACAG	300
GGAATTAAGC AAAATGCTGG ATGCTATAGA TCTTTTAATT GTCTTAATTT TTTTCTATT	360
ATTAAACAAC AGGCTCGAG	379

(2) INFORMATION FOR SEQ ID NO:14:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 528 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:14:

G TTCATGGCC TACGGAAAGT CAGCATGGAT AACAGACTGA TGGAACCTCTT TCCTGCCAAT	60
AAGCAAAGTG TTGAACACTT CACAAAATAT TTTACTGAGG CAGGCTTGAA AGAGCTTTCA	120
GAATATGTTT GGAATCAGCA AACCATCGGA GCTCGTAAGG AGCTCCAGAA AGAACTTCAA	180
GAACAGATGT CCCGTGGTGA TCCATTTAAG GATATAATTT TATATGTCTA GGAGGAGATG	240
AAAAAAAACA ACATCCCAGA GCCAGTTGTC ATCGGAATAG TCTGGTCAAG TGTAATGAGC	300
ACTGTGGAAT GGAACAAAAA AGAGGAGCTT GTAGCAGAGC AAGCCATCAA GCACTTGAAG	360
CAATACAGCC CTCTACTTGC TGCCTTTACT ACTCAAGGTC AGTCTGAGCT GACTCTGTTA	420
CTGAAGATTC AGGAGTATTG CTATGACAAC ATTCATTCA TGAAAGCCTT CCAGAAAATA	480
GTGGTGCTTT TTTATAAAGC TGAAGTCCTG AGCGAGGATG CCCTCGAG	528

(2) INFORMATION FOR SEQ ID NO:15:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 466 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:15:

GAATTCGGCC TTCATGGCCT AGCCCAGGCC ACGCTACACT CTGCCCACAC TGGTGAGCAG	60
GAGGTCTTCC CAGGCCCTGT CATTAGGCTG CATTACTCTT TGCTAAATAA AAGTGGGAGT	120
GGGGCGTGCG CGTTATCCAT GTATTGCCTT TCAGCTCTAG ATCCCCCTCC CCTGCCTGCT	180
CTGCAGTCGT GGGTGGGGCC CGTGCGCCGT TTCTCCTTGG TAGCGTGCAC GGTGTTGAAC	240
TGGGACACTG GGGAGAAAGG GGCTTTTCATG TCGTTTCCTT CCTGCTCCTG CTGCACAGCT	300
GCCAGGAGTG CTCTGCCTGG AGTCTGCAGA CCTCAGAGAG GTCCCAGCAC TGGCTGTGGC	360
CTTTCAGGTG TAGGCAGGTG GGCTCTGCTT CCCGATTCCC TGTGAGCGCC CACCCTCTCG	420
AAAGAATTTT CTGCTTGCCC TGTGACTGTG CAGACTCTGG CTCGAG	466

(2) INFORMATION FOR SEQ ID NO:16:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 288 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:16:

GAATTCGGCC	TTCATGGCCT	AGCGTGATCC	TGGAACGTGC	TCTAGTTCCA	GAGAGTGAGG	60
GCTTTGAGGA	GCATGTACCA	TCTGATAACT	CTTGAAGATA	CAGAGAGAAA	TCCATCTTTT	120
CCCAGGTCTC	CTTCACTGAA	AACAAAAATC	TACTTACATA	CACTGTCACC	TTAGCATCAG	180
AGTCGGATTA	ATGAACTGCG	GAACAAGAGG	TTGTGAGAAT	CTAAGATGGA	ACCTTTCTTT	240
CTTTCTTTCT	TTTTTTTAA	ATTTTGTATT	TTCCATCCAA	CACTCGAG		288

(2) INFORMATION FOR SEQ ID NO:17:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 484 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:17:

GAATTCGGCC	TTCATGGCCT	AGGGCTCTGC	TTATAAACTT	CAAAGTTACA	CTGAAGGATA	60
CGGTA AAAAC	ACCAGTTTAG	TAACCATTTT	TATGATTGG	AATACCATGA	TGGGAACATC	120
TATACTAAGC	ATTCTTGGG	GCATAAAACA	GGCTGGATTT	ACTACTGGAA	TGTGTGTCAT	180
CATACTGATG	GGCCTTTTAA	CACCTTTATTG	CTGCTACAGA	GTAAGTAAAT	CACGGACTAT	240
GATGTTTTCA	TTGGATACCA	CTACCTGGGA	ATATCCAGAT	GTCTGCAGAC	ATTATTTCCG	300
CTCCTTTGGG	CAGTGGTCGA	GTCTCCTCTT	CTCCTTGGTG	TCTCTCATTG	GAGCAATGAT	360
AGTTTATTGG	GTGCTTATGT	CAAAATTTCT	TTTTAATACT	GGAAAGTTTA	TTTTTAATTT	420
TATTCATCAC	ATTAATGACA	CAGACACTAT	ACTGAGTACC	AATAATAGCA	ACCCTGGTCT	480
CGAG						484

(2) INFORMATION FOR SEQ ID NO:18:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 519 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:18:

GAATTGGCCT	TCATGGCCTA	GGAGATATAC	CTAATGCTAG	ATGATGAGTT	AGTGGGTGCA	60
GCGCACCAGC	GTGGCACATG	TATACATATG	TAACCTAACCT	GCACAATGTG	CACATGTACC	120
CTAAACTTA	AAGTATATAT	AAAAAAAAAA	GACNTCGCTA	GTGAGCACGC	TGTATACGAC	180
ATCGCTAATG	AGGACACCAT	ACAAGGCATC	GCTAACGATG	ACGCTGTACA	CAACATCACT	240
AATGATGACA	CCGTATAAGA	CATCGCTAAT	TATGACGCTG	TATACGACAT	CGCTAATGAC	300
ACCGTACGAG	GCACGCTAAC	AAGGATGCTG	TACACAACAT	CGCTAATGAG	GACAGTGTAC	360
AAGCCATCGC	TAATGAGGAC	ACTGTATATG	ACATTGCTAA	CGAGGACACT	GTACAAGGCA	420
TTGCTAACGA	GGACGCTGTA	CACAACATCG	CTAATGACAC	CATATAAGAC	ATCACCAATG	480
AGGATGCTGT	ATATGACATC	GCTAATAACA	CCGCTCGAG			519

(2) INFORMATION FOR SEQ ID NO:19:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 342 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:19:

GCAGCTCTCA TCCTCGTCTC CCCAACACCA TAACGTCTCTC ATCCCGCCTC CAACCCACAC	60
CAGGCCGAAG CCCTCAGAGA GTGTTTTCAT CAGGAACCAAC TCTCGAACCT GAAGGTTGAC	120
TTTAGCGTTT AGCAACCCAG GCGGGTGTGT GTGTTTCCCG TTTTGTTTTC TGAGTGGTAG	180
CAGTGATCAC CGTAATTCCA TGTAGCCATG TGCTAGCAGA ACCCTGTGT CCTCACCGTG	240
GCCCGTGTGA CCCAGCCGA CGAGTGCCCG GCGGAGTCCC CGCTGCCTTC CCATGGTCCA	300
GTGAGCTGCC AGGGCATCAC ATGACTCTCA GCTGGGCTCG AG	342

(2) INFORMATION FOR SEQ ID NO:20:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 580 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:20:

GAATTCGGCC TTCATGGCCT AGAGCAGCTC TGAGGTAGAA ATTACAACGA TGAAAAGAGC	60
ACAACGTACA AAACCAAGAA AGAGTCTGTT GTGTGAAGGG TCATTTCGATG AAGAAGCTTC	120
TGCACAGTCC TTTCAGGAAG TGTTAAGTCA ATGGAGAACC GGAAATCATG ATGACAACAA	180
GAAACAGAAT TTACATGCAG CAGTAAAAGA CTCATTGGAA GAATGCGAAG TACAGACTAA	240
TCTGAAAATT TGGAGAGAAC CACTTAATAT TGAACCTAAA GAAGACATTC TATCCTATAT	300
GGAAAAATTA TGGCTTAAAA AACACAGGAG AACTCCACAA GAGCAACTTT TTAATAATGCT	360
ACCAGATACG TTCCACATC CACATGAAAC CACTGGTGAT GCACAGTGT CTCAAAATGA	420
AAACGATGAA GATAGTGATG GTGAGGAGAC CAAAGTACAA CACACAGCTC TTTTATTGCC	480
AGTAGAAACA TTAAACATAG AGAGACCTGA ACCATCTCTA AAGATAGTCG AACTGGATGA	540
TACTTATGAA GAGGAATTTG AAGAAGCAGA ACATCTCGAG	580

(2) INFORMATION FOR SEQ ID NO:21:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 301 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:21:

GAATTCGGCC TTCATGGCCT AGAAAGATCT AATTATCATG GACCTGCGAC AGTTTCTTAT	60
GTGCCTGTCC CTGTGCACAG CCTTTGCCTT GAGCAAACCC ACAGAAAAGA AGGACCGTGT	120
ACATCATGAG CCTCAGCTCA GTGACAAGGT TCACAATGAT GCTCAGAGTT TTGATTATGA	180
CCATGATGCC TTCTTGGGTG CTGAAGAAGC AAAGACCTTT GATCAGTTGA CACCAGAAGA	240
GAGCAAGGAA AGGTTTGGAA AGATTGTAAG TAAATAGAT GGCGACAAGG ATCGGCTCGA	300
G	301

(2) INFORMATION FOR SEQ ID NO:22:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 332 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:22:

```
GAATTCGGCC TTCATGGCCT AAAAAAAGGA TGGTGTGTTG AGACCAGAAG CAGCAGCAGT    60
CCTCGACATC AACTACAACCT TTCCTTCGCA CAGTGCATAC CCTCTGATAT ACTGAACCCA    120
ACGCCATATCC TCCAGCCCCC TAAGAACTAG AGAGGGAGCC TCACAACATT CCAATTTAAT    180
CCTTCAGAAA ATTCAATTACT CTTCAAAGTT GTCTGTGGTT TTGTGACAAC GATATGACTA    240
GGTGCAAAAT GGCTTGCAAC TAATTAACAA ACATAGAAGC ATCCAACAA CATATACGTG    300
CACAACTGA GGATTTAGGG ATGAAGCTCG AG                                     332
```

(2) INFORMATION FOR SEQ ID NO:23:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 239 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:23:

```
GAATTCGGCC TTCATGGCCT ACCAGCCTGG GCGACAGAGC AAGACTCAGT CTCAAAACAA    60
AACAAAACAA AACAAAAAGA GAAGGCTATT ATTAACATTC GAGATAATGT GCCAGACTGC    120
TTCCATGTAT TTTCATTATT CTGTCCCAA TCTGGTGAAG TGGGTATCTG CACAGCTTTC    180
TCTAGATTGA ACAACTAGTA AGGGGGCTGG CCCTGGAGAA AGTTACCTCC TGCCTCGAG    239
```

(2) INFORMATION FOR SEQ ID NO:24:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 238 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:24:

```
GAATTCGGCC TTCATGGCCT ACTTTTATAT TGTTATTTTT GTAAAGCATC TTTTCTTCAA    60
TTCTTGTTGG CATTCTGGGC CAAAATATTT CAGGTTGGTT CGGTGTGGAG TTAAGAAAAG    120
CAGGCGTTTT AGTGAGAGAA TGGGGAACAG CATCAAGAAA GGCTTTTTTC CTTTTTCTT    180
TTTTTTTGG AGACAGAGTC TTGCCCTGTC ACCCAGGCTG GAGTGCAATG GTCTCGAG    238
```

(2) INFORMATION FOR SEQ ID NO:25:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 231 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:25:

```
GAATTCGGCC TTCATGGCCT AGATGGATTT CTTAATTGAA GTACTTTTAT AATCACAGTG    60
```

ACTGAACAAA ATATTTTCAA AGACATTGT CATTCTTAA AGCCAAGATT TTAAAGACTA	120
ATGTCCTTCC TGAGGGTTAC TTTACTATAC TGTGTATGGT GTATAGCCAC AGAAAGTCAG	180
TCTGATAAAT TTTCAATGTG TAAGTGTGAT GCATTCAACC CAGATCTCGA G	231

(2) INFORMATION FOR SEQ ID NO:26:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 307 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:26:

GAATTCGGCC TTCATGGCCT ACACAGAGTA TATTTATAGC TATCTCAGGG TCCTTGTTCCA	60
ATTGTCGTGT TCATTTCTTC ATCTGCTTCT ACTGATTTTT TCTGCTTCTG TTTACTCTTC	120
ATTTTGGACC TATTTTCCCT TATTTGGTGC TTGTCATACA ATTTGTGGG ACTGGATCTT	180
TGCTAGTCCT TTAAATGTTT TTAAGCTTTG TTTTGGGATG CAGTTAGGTG ACTCAGAAAC	240
AATCAGAAAC AATTTGATCC TTTTATGTCT CTTAAGCTTT GTTATAGGCA GGACCAGAGC	300
TCTCGAG	307

(2) INFORMATION FOR SEQ ID NO:27:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 253 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:27:

GAATTCGGCC TTCATGGCCT ACAATAATAG CCTCCACCT GGTCTTCCTT CTTCAGTCTC	60
TTCAGTCTTT CCCAAAGCTC TTGAATCCTA CATGAACCCA TGCCTCGGTC AAAATATTAC	120
AGGCTGCAGC CAATCTTCAA GTGGCATAA GGCCAAACAT CCATTTATAA TATGGTTGGA	180
ATTCCTAACA CATTTTATCA TAGATCTAAT GCCATACAAT AGGTGGAGGT TAGATCCTCA	240
CGCAACTCTC GAG	253

(2) INFORMATION FOR SEQ ID NO:28:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 254 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:28:

GAATTCGGCC TTCATGGCCT ACAGAGAACT TGTGTTCCGG TTTATTGAAG TTCAGACACT	60
TCTCCTCGCT CCATTCTGTC CACATTTGTG TGAGCACATC TGGACACTCC TGGGAAAGCC	120
TGACTCAATT ATGAATGCTT CATGGCCTGT GGCAGGTCCT GTTAATGAAG TTTTAATACA	180
CTCCTCACAG TATCTTATGG AAGTAACACA TGACCTTAGA CTACGACTCA AGAACTATAT	240
GATGCCAGCT CGAG	254

(2) INFORMATION FOR SEQ ID NO:29:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 211 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:29:

GAATTCGGCC TTCATGGCCT ACGAGAAGGA GTGGAAGAGT AAGCAGACTA GGAAAATACA	60
GTACAACCAT CAGGCAGCAT TACAGACCCA CTTAAGGTTT GTGGCCATGT GTGGTTGTGT	120
GGTTTTTTTT CTGGCCATGC TCAGTTACAT AGGGGCAAGT GCAAAAAAAA CCCAGAGTT	180
TGTTTAACT AGAGCTCTGG TTTTGCCAAA C	211

(2) INFORMATION FOR SEQ ID NO:30:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 521 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:30:

GAATTCGGCC TTCATGGCCT AGGATCAGGT TCGTCCTTTA GTGTTGTGTA TGGTTATCAT	60
TTGTTTGTAG GTTAGTTGA TTAGTCATTG TTGGGTGGTG ATTAGTCGGT TGTTGATGAG	120
ATATTTGGAG GTGGGGATCA ATATAGGGGG AAATAGAATG ATCAGTACTG CGGCGGGTAG	180
GCCTAGGATT GTGGGGGCAA TGAATGAAGC GAACAGATTT TCGTTCATT TGGTTCTCAG	240
GGTTTGTAT AATTTTTTAT TTTTATGGGC TTTGGTGAGG GAAGTAGGTG GTGGAGCACA	300
GGCACTGCAG GTCAATGGAG GTGGAGTACA GGGACTACAG GTCAATGGAG GTGGAGCACA	360
GGGACTAAAG GTCAATGGAG GTGGGGCACA GGGACTACAC GTCAGTGGAG GTGGAGTCAC	420
AGGGACTACA GGTCACTGGA GGTGGAGCAC AGAGACTACA GGTCACTGGA GGTGGGGCAC	480
AGAGACTACA GGTCAGTGA GGTGGAGCAC AGAGACCACA G	521

(2) INFORMATION FOR SEQ ID NO:31:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 238 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:31:

GAATTCGGCC TTCATGGCCT AAAATTCCT CTAAGTACTG ATTTAGCTGC ATTGTATAAG	60
TATATGCTTC CATTTTCATT CATTTCCAAA TATTTTCTAA TTTCCTTGC AATTTTTTTT	120
TCAGGAATTC GGGCCTTGCT GTGTTGCCCA GGCTGGAGAG CAGTGCCACT ATCACAGCTC	180
ACTATAAACT CAACTCCTG GGCTCAAGCA ACCCTCCCAC CTCCCAACTC CCCTCGAC	238

(2) INFORMATION FOR SEQ ID NO:32:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 257 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:32:

GGTTTCTTAA	AAAAAAAAAA	AAAAGGAATT	TGATCCAGAG	CAATTTTCT	CAATTAAAAT	60
TTGTGATTAC	ATTTCTGAGT	TTCCATGGCA	GAGTTGTGAG	TGGGGCTGTG	ATATAATTTA	120
ACTTCTCCTA	AATTGCTGAC	ACCGATAACC	CTATAAATTA	ACAGATGGCG	GAGGGAAATC	180
TCCTGGCTTC	TTCCTGGCTA	GTTTTTTTA	ATGGTCTGAT	TTTTGTAATA	GGGGTTTTGA	240
GTCCCAGCCG	ACTCGAG					257

(2) INFORMATION FOR SEQ ID NO:33:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 251 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:33:

GAATTCGGCC	TTCATGGCCT	AAAGACTTAC	GTTATATTTT	CATATACTCC	TTCCCACTCT	60
TAGTGTGTTG	TCAATATACA	TTTTGTTTTA	CATGTAAAAA	CACCACAGTA	TATTGTTCTT	120
AATTTTGCTT	TTAATAGTAA	ACTGTCTTAT	AACAAATTAT	GAAAATGGAA	AAAAACATGT	180
CTTTCTTATT	TGCCCTCATA	TTTATCCATT	TAGGCACTCT	TCCTTTTTC	CTTTCATTCC	240
AGTTCTCGA	G					251

(2) INFORMATION FOR SEQ ID NO:34:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 245 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:34:

GAATTCGGCC	TTCATGGCCT	ACTAACATTT	ATGAAAATTA	TTTGTAATA	AAATAAGAGG	60
CATTGAGATT	AAAATTGGAG	ATAAAGTTGC	TGATGTGTTG	TTTTCTGAA	GTATTTTTTT	120
TCTTAATTCT	GATCTTTGTT	TCCCAATACA	ATCACACTCA	CACCCTTGCA	GTTCAAGTTT	180
CTGACGACTC	TCTAGTGTGC	CAGATCTGTG	TTTCTATGTC	AGTGATCTGT	TCCCCATCTC	240
TCGAG						245

(2) INFORMATION FOR SEQ ID NO:35:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 383 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:35:

```

GAATTCGCTT CATGGCCTAC CGAGAAATGG GTGTGATTGC TGCCATGAGA GATGGTTTTG      60
GTTTCATCAA GTGTGTGGAT CGTGATGTTT GTATGTTCTT CCACTTCAGT GAAATTCTGG      120
ATGGGAACCA GCTCCATATT GCAGATGAAG TAGAGTTTAC TGTGGTTCCT GATATGCTCT      180
CTGCTCAAAG AAATCATGCT ATTAGGATTA AAAAATTCC CAAGGGCACG GTTTCATTTC      240
ATTCCCATTC AGATCACCGT TTTCTGGGCA CGGTAGAAAA AGAAGCCACT TTTCCAATC      300
CTAAACCAC TAGCCCAAAT AAAGGCAAAG AGAAGGAGGC TGAGGATGGC ATTATTGCTT      360
ATGATGACTG TGGGGTCTC GAG                                          383

```

(2) INFORMATION FOR SEQ ID NO:36:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 133 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:36:

```

GAATTCGGCC TTCATGGCCT ACTGCCGCTC CTGGTGCTGC TTGTGTGCTC GTTTGGTGCG      60
GACCTGGTAC CTCTTTTGTG AAGCGGCAGC TGAGGAGACT CCGGCGCTCG CCATGGCCGA      120
CGAAAAGCTC GAG                                          133

```

(2) INFORMATION FOR SEQ ID NO:37:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 276 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:37:

```

GAATTCGGCC TTCATGGCCT AAGGTAGTCT AGGCTCATCT TCATGAGGGA ACTGAGGTCT      60
TGGGGGGTGG GGGTTACCCA AATAGGTTCA CAGAAGAACC AGAAATAAAA CCTGCCTTTC      120
TAGACTGTAA GTCTTGTGAT TGTCATCTAA ATGGTTGTCT CTATACAGCA ACTCATCTCT      180
AGAACTGAAA ATAAGTTTAA ATCCCTCCTC CATCCCAAT AATTCAAGCT GCATTTTCAGA      240
GAAAACCAGG ACTTTGGAAT CAGACAGCAA CTCGAG                                          276

```

(2) INFORMATION FOR SEQ ID NO:38:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 336 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:38:

GAATTTGTGC	TCTTAGAGTA	GGAGTTGGAA	CTATAGGACT	TGAAGGCAAG	AGCAGGTATC	60
TTATCAAGGA	TCTACTCACT	CAGTTTCCCT	AAAGCTCTCT	CTCCAGATCG	GATTCAACCG	120
CACATCATGA	CAGATGTTCC	GGCTACATTT	ACCCAGGCTG	AGTGTAATGG	GGATAAACCA	180
CCTGAAAACG	GTCAACAAAC	AATCACTAAA	ATCAGTGAGG	AATTGACTGA	TGTGGACAGC	240
CCCCTGCCAC	ACTACAGGGT	AGAACCCAGT	CTGGAAGGTG	CACTCACCAA	AGGAAGTCAG	300
GAGGAAAGAA	GAAAATTACA	AGGGAACAGA	CTCGAG			336

(2) INFORMATION FOR SEQ ID NO:39:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 385 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:39:

GAATTCGGCC	TTCATGGCCT	AGTCGGAGAA	GGACATCCAG	GATCTGAAGT	TTGGGGTCGA	60
GCAGGATGTT	GATATGGTGT	TTGCGTCATT	CATCCGCAAG	GCATCTGATG	TCCATGAAGT	120
TAGGAAGGTC	CTGGGAGAGA	AGGGAAGAAA	CATCAAGATT	ATCAGCAAAA	TGGAGAATCA	180
TGAGGGGGTT	CGGAGGTTTG	ATGAAATCCT	GGAGGCCAGT	GATGGGATCA	TGGTGGCTCG	240
TGGTGATCTA	GGCATTGAGA	TTCCTGCAGA	GAAGGTCTTC	CTTGCTCAGA	AGATGATGAT	300
TGGACGGTGC	AACCGAGCTG	GGAAGCCTGT	CATCTGTGCT	ACTCAGATGC	TGGAGAGCAT	360
GATCAAGAAG	CCCCGCCCCA	CTCGA				385

(2) INFORMATION FOR SEQ ID NO:40:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 245 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:40:

GAATTCGGCC	TTGCTAAAAA	AAAAAAAAAA	GAGGCAAGTA	ATGTAATATC	CCCCACCTTT	60
GGTTTTCTTA	TCTATAAATA	CTGATTAAAA	AAAAAAGTAC	ACTGTCTGCC	TTATAAGCTA	120
AAATGAGTGA	ATACAGGCAA	AATGCCTTAC	ATTTTACTTT	ACATTTACTA	AGCACCCAGA	180
AAATGTTAAC	TATGATGACA	ATTATGATGA	TGATGATATT	GATATTTTCA	AGGAGGGCGC	240
TCGAG						245

(2) INFORMATION FOR SEQ ID NO:41:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 247 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:41:

GAATTCGGCC	TTCATGGCCT	AAATAAAGAT	GATTTTGTG	CTTAGCAGTT	TAAGGTATAT	60
GGCTGCATAT	GCAAACTCT	TTCCCAATTC	AGTCGCTACT	TTTACTTCTG	CCCTTTCTAT	120

CCATCGTCTT CATTTTGTGT GTACAGTGCT GTGTGTAAGC TTATCAGTGT GTTTTTTTAT	180
TTGTATCAGT CATGAAAGTC CTGTTAGGTA TCCAGAGTTC TATTTATCTA GCTGTACAGA	240
TCTCGAG	247

(2) INFORMATION FOR SEQ ID NO:42:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 106 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:42:

GGATATGGTA ACTGAGAACC ATTTTCTAGT TGAGATAACT CATGTACAGG GGGGGTCACA	60
TGACTCAACA ACACACAGAG CACAGAAGAG AACCAACAAT CTCGAG	106

(2) INFORMATION FOR SEQ ID NO:43:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 237 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:43:

GCGTATTTCC AAGTGTATGT ATTTCTAAAG ATAGATTTTT TAAAAACAAA AAATCTTAAT	60
TTAGATGATA AGCGATTTT ACCTTTTTT TTTTTTCAAA GCAACTTGAT CCTGTAAGTT	120
TTGGCATCTT AAGTGGAAAT GTTCATGCAG TTTTGCTGGA TCTTCGCTAT GGCAGTAAAA	180
TGCAATACAG CACTGTGGTT AAGAGTGCAG AACGGAGTCA GTCAGCCTGA ACTCGAG	237

(2) INFORMATION FOR SEQ ID NO:44:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 476 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:44:

GAATTCGGCC TTCATGGCCT ATAGGCCATG AAGGCCGGCC TTCATGGCCT AGGGAGTNGG	60
TGTGTCTGTG CATTTATTTG GATCATGGAA GGTGTAGAT GTGTATTTCT AACTGTAGAT	120
AATGGAGGAC ACATATTTGG GGAGTTTGA GAGGATGTGT ATGTGTGTGT GTGTGCAGTG	180
TGGTATTTCT CTATGTTTG GTGGGTGGG TATGTATCCA TCAAAATATC TCAGATTATC	240
TGATGTAAGA AAATAATTCT GCATCTCAGT GACTTCCAAC AAGGTAGGTT TCTCATGTAT	300
GTTATGTGTC CTCCATTGGT TGGCTTTGAT CAGTTACTGG TCCTGTGCCT TGGATCCAGA	360
TGGATGAAGC GGCCTCATTT GGGACAGGAC TAGAAGGACT TCTTCTGCTC AGAGTCATAC	420
ATGGCATTTC TGATCACATT TCATTTGCCA TAACAAGTCA TGTGGCCATA CTCGAG	476

(2) INFORMATION FOR SEQ ID NO:45:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 358 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:45:

GAATTCGGCC	TTCATGGCCT	AGGCAAACCTC	TGCTGGACTT	AACTTCATCA	ATGTAGTGGG	60
CTCTGTTTGT	GGGGCCCAGG	CTTTGATGAG	TGGTTCAAAC	CCCATGCTGG	GCTGTAAACAC	120
TGGTGCCATA	ACTCCTGCAG	GAATAAACCT	GAGCGGCCTT	CTACCCTCAG	GAGGTCTGCT	180
ACCAAATGCA	CTGCCCAGTG	CAATGCAGGC	AGCTTCTCAA	GCAGGTGTTT	CATTTGGTTT	240
AAAAAATACT	TCAAGTCTCA	GGCCCTTAAA	TCTACTCCAG	CTTCCAGGTG	GTTCACCTAT	300
TTTTAACACT	CTGCAGCAGC	AGCAACAGCA	GCTCTCCCAG	TTTACACCAC	AACTCGAG	358

(2) INFORMATION FOR SEQ ID NO:46:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 353 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:46:

GAATTCGGCC	TTCATGGCCT	AATCATTTTG	ACTTTTCAGTG	CTTCAATGA	CCAGTGGCCT	60
CCAGGGATAA	AGCAACTGCT	TGGTTTGAG	GGCGTCCTCT	GCGCTGCTGA	GCCATCAGCC	120
TCCAATACGC	CAATGCCCAT	AGATGCTAGT	TACAGCCCTG	CTTCCTCCTA	CATAGGGTTC	180
TGTCATCACT	GAGTCTCACC	ATTTCCCTCT	CCCCAGTGTC	TTTATTATGT	GACACACACA	240
CACGGCACTA	TGTTTAAAAA	AGCGTGCTCA	CTGGCAACCT	CTTGGCGTTG	TGTGTTTATT	300
CTGTGTTTTG	TATTGGTGGT	ATCTTGGGGT	CGACCGAAAG	AGTCAACCTC	GAG	353

(2) INFORMATION FOR SEQ ID NO:47:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 456 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:47:

GAATTCGGCC	TTCATGGCCT	AGGGAGCTAC	CAGATGCTGA	AGAAAGGGCC	CTGGCAGACT	60
GGGTTCAAAC	TCAGCCATTG	TCAGCTTGGT	AACCTTGACC	AAGTGTCTTC	CCCTCTGTGA	120
GCCTCAGTTT	TCTCAATAGT	AAGAGGGGAT	AACACACTTA	CCTCTCATAG	CTGTGGACAT	180
GGAGGTGAAA	GTGCCGCATA	CACTGTAAAG	TGTTATATAC	GTGTAAGAGA	AAAAATCGGG	240
CCAGAGGCTG	GGCTTGTGTT	AATTGATTCA	GGAAATTAC	CAGAGGCCCC	CTAGATGCAA	300
CGTCCTTTGG	GTGTCTGGCA	GTGGGCACAA	AGATGAACAA	AACAGTGCCC	CACCCTCACC	360
CCGTCAACCG	TCAGTGCAGC	AGTGGGCTGG	GTGCTTGCGT	CCCACAGTGA	GGAAGGCAGA	420
AGGGGTCCCT	GCCCTCAAAG	GAGGACGATA	CTCGAG			456

(2) INFORMATION FOR SEQ ID NO:48:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 509 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:48:

GAATTCGGCC	TTCATGGCCT	AGCTGCCCCG	CAGCACTTAC	CGGAGCGACC	ATGAGGGTGA	60
CGATTTGAAG	CACACACAGG	CTTCCCAGCA	CCTCCTTTAA	ACCGCCGCTG	GCTTGCCAGG	120
GACAGACGGC	GCGGTTGGCT	CCCCAAAATT	CCGACTGATA	CGCGCCTCGG	CGAGCGAAAG	180
CAAACGCGGG	ATACTCTCGC	GTTCTTGATT	GGCTGCAGTT	GGAATTGATC	ACACCTTTTC	240
AGTTGTACTT	CAATCCTGAA	TTAATCTTTA	AACACTTTCA	AATATGGAGA	TTAATCACCA	300
ACTTCTTATT	TTTTGGGCCA	GTTGGATTCA	ATTTTTTATT	TAACATGATT	TTTCTATATC	360
GTTACTGTCG	AATGCTAGAA	GAAGGCTCTT	TCCGAGGTCG	GACAGCAGAC	TTTGATTTTA	420
TGTTCTTTT	TGGTGGATT	TTAATGACCC	TTTTTGGTCT	GTTTGTGAGC	TTAGTTTCT	480
TGGGCCAGGC	CTTTACAATA	ATGCTCGAG				509

(2) INFORMATION FOR SEQ ID NO:49:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 467 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:49:

GAATTCGGCC	TTCATGGCCT	AAAGCAAGTG	ATTTTCTTTT	TTTAAAGAC	AGGGTCTCAC	60
TTGGTCACCC	AGGCTGGAGT	ACAGTGACAT	CATCACGGCT	CACTGCAACC	TTGCCTCTT	120
GGGCTCAAGT	GATTCCTCCA	TCCCCACCC	CCCTTCTCAC	CCCCAGATTG	GACTATAGGC	180
GTGTACCACC	ACGCCTGGCA	GAGACCGGGT	TTTGCCGTTG	CCCAAGCTGA	TCTCGAACTC	240
CTGAGCTCAA	GCGATCTGCC	CGTCTCAGCC	TCCCCTAAGC	AAGCATTTTT	AAGTTTCTAT	300
GCTGTTTAAT	TTTTTTTAAAC	TGATTAATTT	ATTTCATTG	TGTGGTCATG	GAATATGTTT	360
TTATGATATT	GGTTGTTTGA	GATTTGGTGA	GTCTTCTTT	GTAACCTAGT	TAAACCATTC	420
CATATCTTTT	TAAAAGGATG	TATATTCCTT	ATCTGTTAGG	GCTCGAG		467

(2) INFORMATION FOR SEQ ID NO:50:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 168 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:50:

GAATTCGGCC	TTCATGGCAG	AGTGGAAGGG	GTTGTAAATA	TTAGGAGAGA	GATAATTCTT	60
AGTGCAATTC	TCTGAGGATG	AAGCATGAGA	TGAATCCATG	GCACGAATGG	AACAGCTGGG	120
GAAAGCAGGT	CAGAATGGAT	ATGGATATAA	ATACTGTGAG	TTCTCGAG		168

(2) INFORMATION FOR SEQ ID NO:51:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 228 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:51:

GAAGTAAATT ATTACGATTT CCTTAGGTGG TTAATAAATT ACCATTATTT TCTCTATTTT	60
ACAGATCACG AAATGATAAG TAACTTACCG AAAGTTACAT TATTTAAGTT AATCAAATGT	120
TTATTGATTG CCAGACTTTT TTCTAGGCTT AAGCAAATGT TGGAAAATAC TTCTCTGAGC	180
TTTCAAAAAT GTTATTCTA CTTGTCAGTG CTGCAGGAGT CTCTCGAG	228

(2) INFORMATION FOR SEQ ID NO:52:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 247 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:52:

GCAGAGTCAA TAGATACTTT AAATTGAAGT AAAGAATTAA AAAAGGAAGT GGATAGTTTG	60
GGTATTAGTT TAGCTAGAAA TACAAAGAAA CTTGACTTCT AGGGCAGTAC AAATTCAGC	120
CTTCCACAAA CAAACAGTTG AGAGTATGTT TATCTTCTTA AAATGTGTGG GTGCCTTCCC	180
ACCACTTCAC CTGCTCCTCA CTGGTGCTTT GTCCCTCCC TACTACCATT CCTGTCCCGG	240
TCTCGAG	247

(2) INFORMATION FOR SEQ ID NO:53:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 235 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:53:

GGCCAAAACA AAGCTTATAA AGGTTCTGTC TCCCAACGTA ATTACCTCCA ATCGGCATTT	60
AAAGACATCC GCATTGCTTA CAGCACATCC TAGCCTCATG CTTGCCCAAG GATGGACTCG	120
AAATGAACTA TTTCCAGAGC GACTTATTCA GGCATTCTGT GGAGCCTCCG TTGCCCTGTC	180
CATCACCGGA GCTTTTGTA TGCAGCTAT GCCATTGGCC TCCGCAACC TCGAG	235

(2) INFORMATION FOR SEQ ID NO:54:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 231 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:54:

GAATTCGCCT TCGTGGCCTA AAAAGAAAAA ATCTAAGGTA GATTGTGCCT TTTGTGCCTT	60
TCCTCTGCTC AAGACCTTTC AGTGGCTTCC CACTTCACTC AGTAAAAGGC AAAAAGTCCT	120
TTTAATAACC TACAAGGCAT TATGTTACCC ACATTGTCCC TGCTCCCCCTA CATTGTACTC	180
AAGTCTATGA TCTTTTACC ATTCCTTGTA CAAAGGATT TCCTGGCTG G	231

(2) INFORMATION FOR SEQ ID NO:55:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 330 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:55:

GAATTCGGCC TTCATGGCCT AGAAATATTT TCCTACAAGA GTACTGAATT TCAGGAAATG	60
GGATAGAGCT TCTAACCAGT GTATTCCGTC AAGTAAGATA ATAACAGCTG ACCTGCCAAC	120
AGCATTACAG GGAGATTCTT TGCTCAGCTA ACACATTTCT GTTTTCAAA ATTGATGCTT	180
AATTGTAGCT GTTATTCTAA TTTGTGACAT GGAACAACT CATGCTTCAA TCCTTGATAG	240
AGCAAACTC AGAACAGGTT ATGTAAAAAT ATAGTCTGGC TTTAGAATTT GTTAATTCAC	300
CTGCTTTGCC ACAGAAAATG GAGACTCGAG	330

(2) INFORMATION FOR SEQ ID NO:56:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 230 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:56:

GAATTCTAGA CCTGCCTCGA GATCTGAACT ATAATCTTTT CCATTCTATC TAGCTCCCAT	60
CCTAAGTCCT CTCCTCCTAA CGTGGAACTC TCCTAAAATC TTCTCCTTAT ACTAGGGTTC	120
GAGACATGAG GCTGTCTTTT TGGGCCTTTT GCGTTGTCAC AGTCCCAGAC CACGGAACAT	180
TCTCTCTTCC CCAGGACAGG ACATTCTCTC TTCCCCAGCG CTCCTCGAG	230

(2) INFORMATION FOR SEQ ID NO:57:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 416 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:57:

GAATTCGGCC TTCATGGCCT AAAGGGAAAG TGGGAATATA CACAATGCAN ACACTAGCCA	60
CATGCAATCA TGGGAGAACA GAGCCTACTT AAAAATCANA CCAAGCTTT GCTTCAGAAA	120
TAAGTGGAGT TGAACCCATT CGATCATTTA CGCATGACTT TGCAAAGGTT CTCTGGAGGG	180

GGAAGAGGAT	CAACCTTCTC	TCATACCGCA	CAGCAAGGGA	ACCAAAGTAA	TATAAATCAC	240
TCTTAAAAAT	GTCTGTGTAC	TTTAAGAATA	AGCCATACTG	CTGGCACCTA	GAATATTTTT	300
GTGGGTCCCC	ATCTCTGGCT	TTTCTTGTTT	AAATGGCCCC	CAGGCTAAGA	GGCAGCTGCT	360
CACATCCCTG	CAACAAACAT	GTTCTTTCTT	TTCTGCATAG	CCTTCCATT	CTCGAG	416

(2) INFORMATION FOR SEQ ID NO:58:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 289 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:58:

GAATTCGGCT	TCATGGCCTA	CTAGACCTGC	TCAGTCGTTT	CTAATGAATA	AAAATCAAGT	60
GCCAAAGCTT	CAGCCCCAGA	TAATATGAT	TCCTCCTAGT	GCACAACCAC	CACGCACTCA	120
AACACCACCT	CTGGGACAGA	CACCTCAGCT	TGGTCTCAAA	ACTAATCCAC	CACCTATCCA	180
GGAAGAGCCT	GCCAAGACCA	GCAAAAAGCC	ACCACCGTCA	AAGGAAGAAC	TCCTTAAACT	240
AACGTAAACT	GTTGTGACTG	AATATCTAAA	TAGTGGAAG	TCACTCGAG		289

(2) INFORMATION FOR SEQ ID NO:59:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 382 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:59:

GAATTCGGCC	TTCATGGCCT	AATTTGAGGC	CTGGGTGGAA	CTGACAGGTG	GAGTTTGAAG	60
GCACATCTGC	TAGCTCACAT	AGGAAACAGA	ATCTCCCAGG	GAAAAGACAT	AGGACCTCTG	120
ACTCTAACTG	AGGTTCTGGA	TTATTATGAG	AGATTTTCAG	AAATGGTCTA	ATGGTGTGG	180
CTTGCTCCAT	ACCATAGATT	TTAAGAGACA	GTAGAGCTTC	TGCGATGAGA	TTCCCCCATA	240
AAATAATTAT	GGATCTGCAC	TGGCAAGCTG	GTCTTGCTC	CAAAGACCAA	GAGTTGGTTT	300
GTGGTGCTGA	TTCTGAACCC	TTGCGATGCA	ACTGTCTGGT	AGTAAATGG	CTTGTATGG	360
TAAGAAAGCT	TTAATCCTCG	AG				382

(2) INFORMATION FOR SEQ ID NO:60:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 196 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:60:

AAAAAAAAC	CAAACCCTAT	TATTTTCATTG	ACAGATTGTC	TTAGAGTTGA	TAGCATTTAA	60
TAATTGAGTA	AGTACAGTCC	TTCTTGTTT	CCAACGTGCC	CTATTTTTTC	TTTCTTCTCT	120
ACTTTTGCT	ATGCATTTTC	CCTCTTTCTT	GTTCCTGGT	GAATTCCTAA	ACCTTTTTTT	180
TCAAAATCAC	CTCGAG					196

(2) INFORMATION FOR SEQ ID NO:61:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 281 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:61:

```

GAATTCGGCC TTCATGGCCT AACCACATTT TTCTAATTAG TGTTCTAGAC TGGCTAGATA      60
AATCAACAAT GAATCAACAG TCTTTAAGCA CATATACAGG TATGATAACT CTGTAGTTAA      120
CTCAAATCCT TGTGCTATGT ATTATTTTGC TCGTAACTC AGAATTCAGG AAGCTACCCA      180
CCCAATCAGT CTTTAGCTGT TTTATTTTCA TAACAAGTTT ATGCAGAACC TTCCATATCT      240
CTCATAAAAC CAGAGCATTC ATAGAACCAG AAACCTCTCGA G                        281

```

(2) INFORMATION FOR SEQ ID NO:62:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 400 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:62:

```

GAATTCGGCC TTCATGGCCT AAAAGATTTG AGCATTTCAG AATTTTAAAC ATAAAAGCAT      60
AAACGTCAGT AAAATGAAGG TGTACTATGA TATCTTCAGT TTTATCAGAA ATGATGTAAA      120
AATTACAACC TCTTTAAAAA GTAGTGTTAA TCATTAAGTT AGAAAATATA TAGCTGGGCA      180
TGGTGGCAGA TGCCGTGAAT CCCAGCTACA TGGGAAGGTG AGGTGGGAGA ATCGCTTGAA      240
CCCAGGCAGT GGAGGATGCA GTGAGCCAAG ATCATGCCAC TGCACCCAG CCTGGGTGAC      300
AGAACAAGAC TCCATNTCAA GGAAAAAATA AAAGAAAAAT ATATATATGA ACTTCAGAA      360
CTGAGGTCAT ATATAGACAG GTCTTCCCCC CGTCCTCGAG                        400

```

(2) INFORMATION FOR SEQ ID NO:63:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 297 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:63:

```

GAAACCATAG TGGCAGATTT GTAGCAAAAA GAATCTTTGT AACCTTCCCT TTAGATGTCC      60
TGTGTTATGG CTGGGTTTTT CTCAAAGATC ATAGATTGCA GTGTTTATCT CAACCTCAGTA      120
TTTCCTTTGA AAATTGAACT TTTCTCTATA TTTTCTTTC CCCCATGCAA ACTTTTGTAT      180
TGTTTTTCTG AAATCATAAT TCATTTGACT TACCAGTTAA TATTGATACA GGTCTTGCAT      240
GTTATGAAGT GCATTGTGTA CATTATCTTG TTTAATTTTC ACAACACTCT TCTCGAG      297

```

(2) INFORMATION FOR SEQ ID NO:64:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 361 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:64:

```

GGTCGCAGAA GAGTGTGAGA ACAATCAGTT AAAGAAGCTC AAAGAAATCT GTGAGAAAGA      60
AAAGAAAGAA TTAAAGAAGA AAATGGATAA AAAGAGGCAG GAGAAGATAA CAGAAGCTAA      120
ATCCAAAGAC AAAAGTCAGA TGGAAGAGGA GAAGACAGAG ATGATCCGGT CATATATCCA      180
GGAAGTGGTG CAGTATATCA AGAGGCTAGA AGAAGCGCAA AGTAAACGGC AAGAAAAACT      240
CGTAGAGAAA CACAAGGAAA TACGTCAGCA GATCCTGGAT GAAAAGCCCA AGGGGGAAGG      300
TTCCTCCTCA TTCTTGTCGG AAACCTGCCA TGAGGATCCC TCTGTTTCCC CCAAACCTCGA      360
G

```

(2) INFORMATION FOR SEQ ID NO:65:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 393 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:65:

```

GAATTCGGCC TTCATGGCCT ACTGGGGGAA GAAGGCTGCT TTATGTTTAT TTTTCAAGAC      60
TTTAAAAATA TTTTGTGGTT GTATTGCACT AGGAAATCTC TCCCACCTCT CCCTTTTCTC      120
TTTCTTTCCC TATACAAAAT AAAAGGCCCA CCATAGAGAC TAGGCGGCCG AAAGACTAGG      180
AGGGCTGAGG AAAAGAAATA GGTCTCTGGA GTTGGAACTA AACTGTGCA GCTGCCTCTT      240
CCTGGCGGTG GATGCTGCTT TGGGAGGGCC AGGGAGGCTG CAGGGGGACA GTGTTGGGAT      300
TGTCAAGGAA AAAGGGGTAG GAAGGAAGGT GGAGGGATTG ATCTAGTACC AGGGAGAATA      360
TTCCACTGAA CTGTGATTCT ATGCGGCCTC GAG

```

(2) INFORMATION FOR SEQ ID NO:66:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 335 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:66:

```

GAATTCGGCC TTCATGGCCT AATTGTGTAT TGCTAGAAAA TACACAGTTT TGAGATTTTT      60
GGGCATAATT GGCCTTAGTG TGTCACCTCT GCATTAAAT ATAGGTTAAT AATCAGATGA      120
AAGCAGCCAA TAACCTATGG CTTCTGTACT TTCTGGTGAA AGTTTGTGTA ATGTTTGTAA      180
TTTGATTTTT TCTGCTTATA AATTGTCTCT TAAATCACTC CCCTCCTTCC CGCCCCCCCC      240
ACTCCTTCTC CCTCCTTCCC GCCCCCCCCA CTCCTTCTCC CTCCTTCCC CGCCCCCGAC      300
TCCTTCTCCC TCCTTCCC GCCTCCGATCC TCGAG

```

(2) INFORMATION FOR SEQ ID NO:67:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 235 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:67:

```
GGTGACATAT TTATTGCTTC TGTTTTCCAA CTACATCACT TCAACTAGAA GTAAAGCTAT      60
GATTTTCCTG ACTTCACATA GGAGGCAAAT TTAGAGAAAG TTGTAAAGAT TTCTATGTTT      120
TGGGTTTTTT TTTTCCCTTT TTTTITTTAA GAGTATAAGG TTTACACAAT CATTCTCATA      180
ATGTGACGCA AGCCAGCAAG GCCAAAAATG CTAGAGAAAA TAACGGGATC TCGAG          235
```

(2) INFORMATION FOR SEQ ID NO:68:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 257 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:68:

```
GAATTCGGCC TTCATGGCCT ACCACAATCT GTTTGCTTTT CCTCTTTAGA TTCCAAAAAT      60
AACACCCCAA AGGCTACCTT TTCAAATATT CTACAACATC TGCAAAAATC TTTAGTACTC      120
TGTCCTTGGG GTCAGTCAAG AAATTCCACC CCAGAAGTGT AAAAACCAAT CAATAATATA      180
TGACACTGAT TTTCTCTAAA TTATTATTTT TCTTATGGTT GAGTCTCCTG CCAACTTTAT      240
GTTTCCCAAT CGGCTCG          257
```

(2) INFORMATION FOR SEQ ID NO:69:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 261 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:69:

```
GAATTCGGCC TTCATGGCCT AGCTGGGCAT GGTGATGCAC GCCTGTAATT CTAGCTACTC      60
AGGTGGGGGG TTAAAGGTGA GGCAAGGTCA GCGGTGAAGT GCAGCTCAGA GGGAGGGGTC      120
AAACATAAAC CAGAAGTAT AGGTCTAGAG GTAAAATGGG ATTCATGGGG GGCAGAGGTC      180
AAAGGTGAAG CAGAAGTCAG GGGTGAAGGA AGGTCTGCAA AGTTAAAGGT GCGGTTTCCA      240
GAGTCAGAAG GGGTGCTCGA G          261
```

(2) INFORMATION FOR SEQ ID NO:70:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 279 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:70:

GAATTCGGCC	TTCATGGCCT	AGATTGAATT	TTTAACACAG	TCCTCTCAGA	AACTGACTAA	60
AACAGGTTTT	AAAATTAGCA	AATATTAAGA	ACATACGAGT	AAAAGTCAGT	TTATTTTAGA	120
TAAGTAGGGA	TTTAAATTCA	ACAAAAATAA	ACACATTTTA	AACTCCTATA	ATACATTTAT	180
TTAAATAAAA	TATATTTTGT	CCAAAAGAAG	TGTAAGTTCA	AAGAGTTAAC	ATACAGATTA	240
TATCCTATGA	GATATAATAA	TATTAGAAAC	TGGCTCGAG			279

(2) INFORMATION FOR SEQ ID NO:71:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 255 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:71:

GAATTCGGCC	TTCATGGCCT	AGTTACATTT	ATAATCAGTG	AGGAAAATAT	AAACTATACA	60
ATAAATGAAA	GGGTCATTGG	CCAATTGTTT	GGAGGGGAAA	AATACACCAT	GTTCTAAAAT	120
AAATTTCTAG	TGATTTATTG	TGACTTTCAT	GCATTGGAT	GATTTTAAAG	ATTTTATATA	180
AAAATGAAAC	CATAGCCTTA	CGAGAAGAAA	ATATAAGAA	AAACTTGTAT	AGTCTTGGGA	240
GGGGGGATTG	TCGAG					255

(2) INFORMATION FOR SEQ ID NO:72:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 138 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:72:

GCGATTGAAT	TCTAGACCTG	CCTCGAGATC	GTCTTTTCTA	CCTGGATGAG	AGCTCTACCA	60
CTTCTTTCCT	TTTGCACACT	CATCTCATTG	TATGCACTCT	TGGGCTGTAA	CTGTCAATTC	120
TTTCTCTGTA	CACTCGAG					138

(2) INFORMATION FOR SEQ ID NO:73:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 208 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:73:

GAATTCGGCC	TTCATGGCCT	ATCACATTGC	ATTAAATCTG	TAGATTACAT	TGAGCATTAT	60
GGACATCTTC	AAAATATTTC	AAATTTTGAA	CAGGAGCATG	CTGAAGAGTG	TGTTGTTTAA	120
TTTCTATGTA	TTTGTACATT	TTTTTTCTCT	ATCTTATACT	GCCGAGACCA	GCTCAGTCGG	180
GGAGACCCTA	ACCCAACGGC	AGCTCGAG				208

(2) INFORMATION FOR SEQ ID NO:74:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 268 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:74:

```

GAATTCGGCC TTCATGGCCT ACATGAACT GTTAGTCACT TCATTTCTGT TTCTTCCCTG      60
TTGCAACAGC CCATCTTCGT GGAAGAACC AAGCTTTAGG CTTGGCTCTG AACAGCCACA      120
AAGTGACTTG GCTGAGGTCC TGCCATTTCTG CTCATGCTCA GCAGGGGGCA GCAGACCAGG      180
GCAGTTCAGA GTATGGGGTC AAACCCAGGT CCCTGTCCC ACTCCACCTG TGGATTTACC      240
CTGGATTGGG CAAGCCCAT TACTCGAG

```

(2) INFORMATION FOR SEQ ID NO:75:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 286 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:75:

```

GAATTCGGCC TTCATGGCCT ACGTGAACAA GACCTCCCA AACCTTCAGG TAGTCAACCA      60
CCAGCAAGGC CCCCAACCACA GACACATCCT GAAGCTGCTG CCGTCCATGG AGGCCACTGG      120
GGGCGAGAAG TCCAGCACGC CCATCAAGGG CCCCAAGAGG GGACATCCTA GACAGAACCT      180
ACACAAGCAT TTTGACATCA ATGAGCATTT GCCCTGGATG ATTGTGCTTT TCCTGCTGCT      240
GGTCTTGTG GTGATTGTGG TGTGCAGTAT CCGGGAAAAG CTCGAG

```

(2) INFORMATION FOR SEQ ID NO:76:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 199 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:76:

```

GAATTCTAGA CCTGCCTCGA AAATACACTG TTACTATCTT AATCTCAAGA GTGTCATTAC      60
AGTGAGAATC TCATTTAAAA GCATACCAGT GAAATTAATA GCAGTGCTTA TCAAAGAACA      120
CTGAAATCTG TGAGAATCTT TCTAGGAGCA TTCTTTCTT CTTTGTAGTC CAAGTCCAG      180
GTAGGCCATG AAGGTCGAG

```

(2) INFORMATION FOR SEQ ID NO:77:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 233 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double

(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:77:

GATTGAATTC TAGACCTGCC TCGAGTTCCA CGTCCATGGC CATCCTGAGC ATGCTGCAGG	60
ACATGAATTT CATCAACAAC TACAAAATTG ACTGCCCCGAC CCTGGCCCCG TTCTGTTTGA	120
TGGTGAAGAA GGGCTACCGG GATCCCCCT ACCACAACG GATGCACGCC TTTTCTGTCT	180
CCCACTTCTG CTACCTGCTC TATAAGAACC TGGAGCTCAC CAACTACCTC GAG	233

(2) INFORMATION FOR SEQ ID NO:78:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 276 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:78:

GAATTCGGCC TTCATGGCCT AAGAATAGAG AAAACGTTTT CAGCAGGCTT CACAGAGAAA	60
CCAAACAATA TTTAGAATAT GACAGCATAT GAAGAGTCTG CTA CTCTCTCC AGTGACCCAT	120
ACTTTCTCTT CCATCTCTGC TGGTCTCTC TACTACCGAT TCTTTCTTGC TGTTCTCCTT	180
CTCCATCACC GTGACTTCTA TTGCCTTACT CTAATGTCTT GTCTTCTGTG TTACCCTTCT	240
GTGTGTTTTG CATTGAGAAC TCCCCCTCCG CTCGAG	276

(2) INFORMATION FOR SEQ ID NO:79:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 273 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:79:

GAATTCGGCC TTCATGGCCT AAAAAAAAAA AAAAATCCCT GGCTGAGAAC TATTGGATTA	60
GGGCCTCCNG TACCTATCTT TGAGGGGGAA AGGATGCTAC CATCAACTTT TCTGAATGCC	120
AGGAATGCCT TTTAGTATAG TTATTTCACT TACTATTTTA TAGCATATTT TAATTGTATA	180
GTAAGCATTG TGTCTGTTTT ATGGTAAGGA AACTAAAATT GAGAGATTAG GCTGCTCGTG	240
GTGGCTTATA CTTGTAATC CCAAGCACTC GAG	273

(2) INFORMATION FOR SEQ ID NO:80:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 284 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:80:

GAATTCGGCC TTCATGGCCT AGCGAAATGA CGAAATCTAG CCCTTTGAAA ATAACATTGT	60
TTTTAGAAGA GGACAAATCC TTAAGAGTAA CATCAGACCC AAAGGTTGAG CAGAAAATTG	120
AAGTGATACG TGAAATTGAG ATGAGTGTGG ATGATGATGA TATCAATAGT TCGAAAGTAA	180
TTAATGACCT CTTCACTGAT GTCCTAGAGG AAGGTGAACT AGATATGGAG AAGAGCCAAG	240
AGGAGATGGA TCAAGCATTG GCAGAAAGCA GCGAAGGGCT CGAG	284

(2) INFORMATION FOR SEQ ID NO:81:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 284 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:81:

GGGAACTGGA GGAAAACCAT CACAAGATGG AGTGCCAGCA AAAACTGATC AAGGAGCTGG	60
AGGGCCAGAG GGAAACCCAG AGAGTGCTT TGACCCACCT TACGCTGGAC CTAGAAGAAA	120
GGAGCCAGGA GCTGCAGGCA CAAAGCAGCC AGATCCATGA CCTGGAGAGC CACAGCACCG	180
TTCTGGCAAG AGAGCTGCAG GAGAGGGACC AGGAGGTGAA GTCTCAGCGA GAACAGATCG	240
AGGAGCTGCA GAGGCAGAAA GAGCATCTGA CTCAGGATCT CGAG	284

(2) INFORMATION FOR SEQ ID NO:82:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 311 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:82:

GAATTCGGCC TTCATGGCCT ACTGTGTTGA CTGGTGGCT TGCTTGATAA GAAGGTTTTA	60
TGAAGCACAG CAGATATCTC AGCTGCTAAT CCTGTAAGCC CTTTACCCAT TCTCGCTTTT	120
CTCTGCTCTT GCCACATCAT GAATAGATTG GTATCTATT GTGGGATACT TCTAGTTTTA	180
GCACATGATA TAGGTTATGG TTAATGTTCC TTTCCATCTT CCTGGTTACT GATAATGTTT	240
CTTTTCTGTA GATGGGTCTA TTCGATGGAA GAGTTTCAGC TTTGTTCTGT TTATTCCCT	300
GGGACCTCGA G	311

(2) INFORMATION FOR SEQ ID NO:83:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 329 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:83:

GAATTAATCG TAAGAGAACC TCAGCATTGT GCACGATAAG AGAATGTGTC AGTATTTTCTAG	60
GGTTCTACAT TTTATCTGTA AAATGTGACT TTTTTTTTTT TTTATCACAA CAGAAGTAAA	120
ATGTTGCTTT GTACCTGGTG TCTTTTATTA AGAATTTACT CCCCCATTT CTCACAGAGA	180
ATAACAGTCG GGAGTCATTG TCACAATATA ATAGAAATGT TAGCAACCAG ATTCATGTAA	240

GGAATAAGTG GTCCTCATGA ATTGCATTAA GACTCTGTAC TGCTCATATT AACTCCATC 300
CTCTCTGTAG TTTGCTGGGT ATTCTCGAG 329

(2) INFORMATION FOR SEQ ID NO:84:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 312 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:84:

GAATTCGGCC TTCATGGCCT AGAAAGACAT CATTTAAGTN CTTTAAACAT TTAGTTTGTG 60
GTCATAAGTT GACCTTTATG TGCTTTCTGA ATTGGAACCT AAAATAATCT TTAATTCATT 120
ATTTTTTCTA CTCTAGGCC AGTTTGTAGT TTAATATTTA TAAAAGGTTA GATAGTTATA 180
GATAGGATTA TTTGCAGTT TTGAAACAAC ATACAAATTG TTATAGATT CAGAGTAGGG 240
CTAATCACAG GAAAGACAAA AGTCAGAATG CTTNAGGTAA GCCCCTTCTC ATTATATAAG 300
ATCAAGCTCG AG 312

(2) INFORMATION FOR SEQ ID NO:85:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 304 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:85:

GAATTCGGCC TTCATGGCCT AAAAAGTTTC AACTTAGAAA AACTAGCAAG GGATTGTTCA 60
CCCTTACCCC AGTGGTTGGT GCTAGAGAAA AAATGGAGGA TGTCTGTTCC ACGCAGACCC 120
TGGTGGTTTA AAACACACAT ATAGATGGCT CTGGGACCAC CAAAATAGCA GCAGCAAAGA 180
GCCACTCCAC CAGCCTCCCC TCCACTCCCC CAGGCCCCAC ACAGCAGAAG GCTCCAGCCA 240
CTTTTGGAA GCCTGTAGCC TGGCTCCATC TTGCCCTGTG CCACAAATGC CCATGGCCCT 300
CGAG 304

(2) INFORMATION FOR SEQ ID NO:86:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 291 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:86:

GAATTTTGAA CACTAAAGCT TTGGATACAC AAATTTATAA CATCTTATTT ATAAATCAGT 60
GGGTACAGA AAGCAGAGAT CCCATAATCA AGCATGGCAA ACATGTTGAA GAATATGCTT 120
ACAATGATTT CTGCTATAGA TTTCATAATG GGGATTGAGA GAAGTAGAGT TATGGTGCTG 180
GTTCACTGCA TTGATTGGAT CAGGCGCTGG AAACCTCTCC TGATAGATTT TATTCTCACC 240
TGTTGGGCAA TTCCAGAAT ATTCTGCTGT AATTTTACAT GTGGGCTCGA G 291

(2) INFORMATION FOR SEQ ID NO:87:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 423 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:87:

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GAATTCGGCC TTCATGGCCT AGCTAGAAAA AAAAAAAAAA AAGCCCTTTT CAGTTTGTGC      60
ACTGTGTATG GTCCGTGTAG ATTGATGCAG ATTTTCTGAA ATGAAATGTT TGTTTAGACG      120
AGATCATACC GGTAAGCAG GAATGACAAA GCTTGCTTTT CTGGTATGTT CTAGGTGTAT      180
TGTGACTTTT ACTGTTATAT TAATTGCCAA TATAAGTAAA TATAGATTAT ATATGTATAG      240
TGTTTCACAA AGCTTAGACC TTTACCTTCC AGCCACCCCA CAGTGCTTGA TATTTTCAGAG      300
TCAGTCATTG GTTATACATG TGTAGTTCCA AAGCACATAA GCTAGAAGAA GAAATATTTT      360
TAGGAGCACT ACCATCTGTT TTCAACATGA AATGCCACAC ACATAGAACT CCAACATCTC      420
GAG

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(2) INFORMATION FOR SEQ ID NO:88:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 172 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:88:

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GCGATTGAAT TCTAGACCTG CCTCGAGCTT GGGGGGATTA CAGTTCAACA AGAGATTCAG      60
GCAGAGACAA ATATTCCAAA CTATATCAGG AATTAAGTAG GCTTTGCTGT CCTTTTGCAG      120
CTTTGAGTCA ACCCATATGA GAGTGAATTC TCCGATCCTG TACATACTCG AG              172

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(2) INFORMATION FOR SEQ ID NO:89:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 260 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:89:

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GAATTCGGCC TTCATGGCCT ACCCGTGTTG TCCAGTATAC CTTATAACAC TTAGCCACTT      60
CTCCCCACCC TCCAGAAGGG GTCCACGTTG AATTCTGAAT CATCTTGAAA ATAAGATTCC      120
AACCACAAAA AAAATTTAGC CATTTCTTTA CTAAAAAAAA CCAAAAAACA AATCTGTTTT      180
ATAATCACAG ATTTTGTAGC AAATTTCTTG TATCAGGAAG AAATACAAAT TTTGTCTATG      240
TTCTCAAGCA GTGTCTCGAG

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(2) INFORMATION FOR SEQ ID NO:90:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 250 base pairs

(B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:90:

GAATTCGGCC	TTCATGGCCT	AAACTAAGAT	AAAAATAAAC	AGATAGGAGA	GCTGAATTCC	60
ATTTCAAGTC	CTCATGTATA	TGCTTACAAA	GTTCCAAATT	AAGCTTGGGA	CTGGTTCTTA	120
CATGGCAGGT	AATCCAAACC	TTTTCTATTT	ACTGAAGATT	TTCAGCTCTC	TTACAGAAAT	180
ACACAGGCTA	CCATTAAAAT	TGTAGGGATA	AATTTTAAAT	TGAATTTGAA	AATAAGAGCA	240
AGTACTCGAG						250

(2) INFORMATION FOR SEQ ID NO:91:

(i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 260 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:91:

GAATTGAAAC	ACAGAGTTGT	TCTGCTGATA	GTTTTGGGGA	TACGTCCATC	TTTTTAAGGG	60
ATTGCTTTCA	TCTAATTCTG	GCAGGACCTC	ACCAAAGAT	CCAGCCTCAT	ACCTACATCA	120
GACAAAATAT	CGCCGTTGTT	CCTTCTGTAC	TAAAGTATGT	TGTTTTGCTT	TGGAAACACC	180
CACTCACTTT	GCAATAGCCG	TGCAAGATGA	ATGCAGATTA	CACTGATCTT	ATGTGTTACA	240
AAATTGGAGA	AAGTCTCGAG					260

(2) INFORMATION FOR SEQ ID NO:92:

(i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 354 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:92:

GAATTCGGCC	TTCATGGCCT	AATTTTCATCT	TTTTTTCCTG	GTGCTGCATA	AACATATATT	60
AAATGTTGTT	ACTGATCCCT	AGTACTGTTG	ATTGTGACC	CTTCTCCTGA	GGGAGACTAA	120
AGCTGCTTGA	GCTAAAGGCT	TTTGAGACAT	CCCATACGGT	TCCCTGAACA	AAGTTTCTCT	180
TCCTGACCTC	AGTTCTCTTG	ATGACCTTGG	CAAGTGGGCC	CGACTAGTTG	GACACTAATG	240
AGGCATCGTA	ACATGCCGGC	CCCATCCTGT	CCATTCTGTT	CTCTTGCCA	TCTAGCATTC	300
AGTGTGTGTG	CTTCCTAGTG	GGCATGAAGA	CGGCTTTAAA	ACCATCCACT	CGAG	354

(2) INFORMATION FOR SEQ ID NO:93:

(i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 493 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:93:

GCTGAAAATG	CAAAACATGA	AGAAAGTGAT	TGAGGCAATT	CGAGTGGAGC	TGGTTCAGTA	60
CTGGGACCAG	TGCTTTTATA	GCCAGGAGCA	GAGACAAGCT	TTTGCCCCTT	TCTGTGCTGA	120
GGACTACACA	GAAAGTCTGC	TCCAGCTCCA	CGATGCTGAG	ATTGTGCGGT	TAAAAAACTA	180
CTATGAAGTT	CACAAGGAAC	TCTTTGAAGG	TGTCCAGAAG	TGGGAAGAAA	CCTGGAGGCT	240
TTTCTTAGAG	TTTGAGAGAA	AAGCTTCAGA	TCCAAATCGA	TTTACAAACC	GAGGAGGAAA	300
TCTTCTAAAA	GAAGAAAAAC	AACGAGCCAA	GCTCCAGAAA	ATGTTGCCCA	AGCTGGAAGA	360
AGAGTTGAAG	GCACGAATTG	AATTGTGGGA	ACAGGAACAT	TCAAAGGCAT	TTATGGTGAA	420
TGGGCAGAAA	TTCATGGAGT	ATGTGGCAGA	ACAATGGGAG	ATGCATCGAT	TGGAGAAAGA	480
GAGACTCCTC	GAG					493

(2) INFORMATION FOR SEQ ID NO:94:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 293 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:94:

GAATTCGGCC	TTCATGGCCT	ACACACGGCC	AAATTTGAGG	GCATTCTCAC	ATGTGTTCTT	60
CTCTCAAAAC	CACTGGGGTT	GACAGATCCA	GGAGGCTAAA	AAAAAGTGAC	CTCTATAATT	120
CTTTAAAGGT	GCTATTTTAA	GAANATTGTA	TAATTTATTC	ACAGTATATC	TAAAACAGAA	180
TTAAGGACAA	TTAAAATATC	TTATGTGACA	GCCTTTATGT	CTAGTCACAT	TTGATGAAAT	240
AAAAAACTTC	TGAATCTGAA	TAGAAGTTCT	ACTGTNTCAG	GATTGAACTC	GAG	293

(2) INFORMATION FOR SEQ ID NO:95:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 280 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:95:

GAATTCGGCC	TTCATGGCCT	AAAAAGACAG	GAAAATAAGT	CTCTTTGTAT	CCTTATTAAT	60
CATTTGAAAT	TATGCTATAA	TATTTTTTAA	AACACACCTG	TTTGGTTCTG	GGTGAAGCAG	120
TTCCTGAAGG	AGTGTTTTGT	CAGAATATAT	TGTTAGGTGA	ATAGAGGGTT	CTGTGGCCAA	180
GTAAGTTTGG	GAAATAGTGG	GTTAGACAAA	GTTGAGTTAC	TGTTGGCCTT	TCAGACCTTT	240
GATACGCTAA	TGTGCATTTT	AAATCTCCAA	GAAGCTCGAG			280

(2) INFORMATION FOR SEQ ID NO:96:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 279 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:96:

GAATTCTCCA GCCTGGGTGA CAGAGTAAGA CTCCATCTCA AAAACAAAAA AACCCAACAG	60
GATAAAATTT AATAGGAGTA AATATAAAGT TCTACGTTTT GATTTTAAAA ATCTAGGTAC	120
TGTATAGTGT GTATTAGTTG GGGTTCCTTT TTTGAAACTT AATCTTGCCT ATAAAACACA	180
AAAGAGTTTA AGATGATATT GAGACTCCTC CTGTCCTCAT TCCTTTTCCT TCCTAATAGC	240
TCAGTCCTGA AGCTCTTAGG TGAGGCAGAA CAACTCGAG	279

(2) INFORMATION FOR SEQ ID NO:97:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 307 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:97:

GAATTCGGCC TTCATGGCCT AGGATACCTT CATTTC AAGG AGCCTCTTTA CAGTAACTGG	60
GCTAAACATT TTGTTGTCGT CCGTCGGCCT TATGTCTTCA TCTATAACAG TGACAAAGAC	120
CCTGTGGAGC GTGGAATCAT TAACCTGTCC ACAGCACAGG TGGAGTACAG TGAGGACCAG	180
CAGGCCATGG TGAAGACACC AAACACCTTT GCTGTCTGCA CAAAGCACCG TGGGGTCCTT	240
TTGCAGGCC TCAATGACAA AGACATGAAC GACTGGTTGT ATGCCTTCAA CCCACTTCTA	300
GCTCGAG	307

(2) INFORMATION FOR SEQ ID NO:98:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 292 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:98:

GAGCTGTGTC AGCATCGATC AGGGGTCTGT AGACAAAAAT TCCCAAAGAT TTGAGACTTT	60
ATGGGGGAA ACAGATCACT GGCGGGGAAT AAGCCACAGG CCAAAGGAGG AAATGCTGGG	120
ACCAGAAGTC CCGCTTGCCG CCTTTTGCTA AAAGTCCGC ACGCCTGCTC GGCGTGGGCG	180
CAAGCATAGT GTCGTCGGGG CTCTGCGACG TCTGATTGGC TCTCTGCAGT GCACCGTCGA	240
GGTAGAAGGC TCAGCTCCTA GTCGCTCCCA AATTACTTGT TTGGTGCTCG AG	292

(2) INFORMATION FOR SEQ ID NO:99:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 397 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:99:

GAATTCGGCC TTCATGGCCT AGCTTGAGGA ATGACCCAAC TCTCTCTGGA AAGTCACTTT	60
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GCCTCTCTGT TCTGGTTCTC TCATTTTATA AAGTGCCTTC TTCCTTTCTG CATTTATAAG	120
TAAACATGAG AAAAATCTGA AAAGACTTCT TCAGGATGTT TAAGGAAACA AATGTTGCTT	180
TCCTTGGGTT GGGTCGTTTC ATAAGAGTGA TGTTTGCCAT AAAACTGGAG CCTCATAGAC	240
GATCCTGCAG GGAGGAAGCT TTCCTTGGTC ACCTGACTCA TGTGTTTATA TATAGTATAG	300
AGGAGAGGTA TTCCAAAAGA CCCGTCGCTT TTCCTGTGTC CCACAGCTGC CTGTAGAGTT	360
GTGGCACCAT AAACTTTAGC AGCTGGAAT CCTCGAG	397

(2) INFORMATION FOR SEQ ID NO:100:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 370 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:100:

GAATTCGGCC AAAGAGGCCT ATTAATTTAA TAAAGCCATA TCATACCTCT CTTTAACATT	60
GTAAAAGGA AACTGTGTGT GTGTATTTGT GTTAATGTTA ANTTCTCTTC ATTTTGTGTC	120
TTGGGGGGCT GTTTATTGA GGATGGTCGG GGGCGGGTG GGTGAGACCC ATCCATCCCC	180
CATGGAAGAC CAGACCCATC CATCCCCAT GGAAGACCAT TCCCGTGTGT TCAGACTGGC	240
AGGGTACTTC CATAGACAGG AACATTCTGG ATGCTCTGAT GCTGAACACT ACCAGAATCG	300
GCCATGGATT TGCTTTGAGC AAACACCCCG CAGTCAGGAC TTAATCCTGG AAAAAGGACA	360
TCTTCTCGAG	370

(2) INFORMATION FOR SEQ ID NO:101:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 340 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:101:

GAAAAAATA GACAAACTA TGATGTAAAA ATGCTTAAAA ACAATTATTC CTCTCTGCTA	60
ATTTTAATGC AAAATAAATG ATGCTAGCAT TTAATATGTT TATATGATCT TGTTTTTAGG	120
ATTGAAATTT TAATACAATG GCCTTTTGTA ACTATTTTTA CTATTATAGC TCAGGTGTTT	180
GAATCTCTC TACCCACCT ATCACCCTA TCCCCTAACA AAGAGTCTGG CTTTATAAAT	240
ACTGTTGAAT GAAAATTGGT TCTCTAAATG GTTAACAAGA TGAATCCACA TAAATCATAA	300
TTCACTACTG AGGAACCGAA TTTATACCA GCGTCTCGAG	340

(2) INFORMATION FOR SEQ ID NO:102:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 370 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:102:

GAATTCGGCC TTCATGGCCT AGATTGAATT CTAGACCTGA TGTGAGAATG ATGGGCTTGG	60
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AGTGTTCCTGG	AAATAGCTGG	GAGGCCTGTG	TGTTTAGGAG	CGCCTTAAAC	AGTAGGATAT	120
AAGGGCAGAG	AAGTAGCTGG	GAAC TGAGAA	GAAC TTTGGC	TGTTATTCTA	GTAA GACTGA	180
AAATTT CAGG	TGGGATTTGA	ACAGAGATGT	GTGGTGATCT	GACTTG GTTC	ATTCTGCTGT	240
GGTGAAGAGA	CTGGAGGTGC	GGGGCAAGTA	TGGAAGCATG	GAGACCATTA	ATTTATGGGG	300
GCAATGGTAG	AGGGAAGAGA	AACAATGCTA	TTAACTGGAG	TAGGAGCACA	CAGAGAACAA	360
GCCACTCGAG						370

(2) INFORMATION FOR SEQ ID NO:103:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 270 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:103:

GCGATTGAAT	TCTAGACCTG	CCTTGAGATC	ACCGAGTGCT	TCATCTCTGA	CAGTTCCTCT	60
GACCAGATGA	CCACAGGCAC	CAACGAGAAC	GCCGACAGCA	TGACATCCAT	GAGCACACCC	120
TCAGAGCCTG	GCATCTGCCG	CTTTACCGCC	TCACCACCCA	AGCCCCAGGA	TGCGGACCGG	180
GGCAAAAACG	TGGCTGTGCC	CATCCCTCAC	CGGGCCAACA	AGAGTGAGTG	CTCAGACCAC	240
CTCCCAGGCA	GTGCCCCCCC	GACTCTCGAG				270

(2) INFORMATION FOR SEQ ID NO:104:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 286 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:104:

GAATTCGCCT	TCATGGCCTA	ATATGCTTAT	GAATATGATG	TTGATGGACA	GCTCCAAACA	60
GTTTACCTCA	ATGAAAAGAT	AATGTGGCGG	TACAACTACG	ATCTGAATGG	AAACCTCCAT	120
TTACTGAACC	CAAGTAACAG	TGCGCGTCTG	ACACCCCTTC	GCTATGACCT	GCGAGACAGA	180
ATCACTCGAC	TGGGTGATGT	TCAATATCGG	TTGGATGAAG	ATGGTTTCCT	ACGTCAAAGG	240
GGCACGGAAA	TCTTTGAATA	TAGCTCCAAG	GGGCTTCTAA	CTCGAG		286

(2) INFORMATION FOR SEQ ID NO:105:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 291 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:105:

GAATTCGGCC	TTTATGGCCT	ACTTAAATCT	TAGATGCTAA	TGGGAGAAAC	TGATTTTTTA	60
AAAAACAGGG	AAACTAATTA	ACATTTTATC	AGATATGCTA	TGAAGTAAAC	AGTTGAAGAC	120
TGACAGTCCA	GTGGATACCG	AGGAGTTCCT	TTAGATACCC	TGGTGAGGTA	AGGACACAGG	180
CAAGGGGAGA	GCTGAGACCT	GAATATGAGG	AGAAGCCAGG	CGAGCACACA	ATAGGGCAGA	240

AAGGAGCAGT AGGTCAAAGC CTGAGGCAGG AGAGAGCTTG ACTGACTCGA G

291

(2) INFORMATION FOR SEQ ID NO:106:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 339 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:106:

GAATTCGGCC	TTCATGGCCT	AGAAATGGTT	CTGAAAGCGA	CAGTAGAGAG	ATGCAGTTGT	60
GATGATTTCA	ACAACCTGGA	TGTTTTCTTT	CTCCTCTTTG	CTTCCATTCA	TCTCTGTTGG	120
CTGCTGTTGA	TGGAGTCAGA	CAGTAAACAC	GTGGCTTGGA	TAACACCCAT	CATCCTATGA	180
AGAAATATAGG	GAGTACTTGT	TCTCTGTTGA	TTCAACTTTT	ATGTCTCCAG	TAACATTGCG	240
CTTATGAAGG	TACCTGTATT	TGTATGGACT	CTGAATAAAG	AAGAATTCAT	TTGTTTAGCA	300
AGTATTAGTT	CAGCAACCAC	TGAGAAACAA	GCACTCGAG			339

(2) INFORMATION FOR SEQ ID NO:107:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 439 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:107:

GAATTCGGCC	TTCATGGCCT	ACATCATGTC	AAAGAGTACT	ACATACAGTT	TGGAATCTCC	60
TAAAGACCCG	GTAATACCAG	CTCGTTTCTT	CACTCAACCT	GACAAGAATT	TCAGTAACAC	120
CAAAAATTAT	CTGCCTCCTG	AAATGAAATC	ATTTTTCACT	CCTGGAAAAC	CTAAAACAAC	180
CAATGTTCTA	GGAGCTGTTA	ACAAGCCACT	TTCATCAGCA	GGCAAGCAAT	CTCAGACCAA	240
ATCATCACGA	ATGGAAACTG	TAAGCAATGC	AAGCAGCAGC	TCAAATCCAA	GCTCTCCTGG	300
AAGAATAAAG	GGGAGGCTTG	ATAGTTCTGA	AATGGATCAC	AGTGAAAATG	AAGATTACAC	360
AATGTCTTCA	CCTTTGCCCG	GGAAAAAAG	TGACAAGAGA	GACGACTCTG	ATCTTGTAG	420
GTCTGAATCG	GAGCTCGAG					439

(2) INFORMATION FOR SEQ ID NO:108:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 298 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:108:

GAATTCGGCC	TTCATGGCCT	AATTGAATTC	TAGACCTGCC	TCGAGAGGCA	GGTCTAGAAT	60
TCCAAATGTA	AAATTTACTA	AGGCTTTTCA	TGTGGAAGTA	GAATGCATAT	ATCTTTCTTG	120
ATATAACAAA	TGAATTTGGT	TGTAGCTAAC	GTGTTGTACT	AGTAAAGGTC	CACCTGCTAA	180
ACTTTTCTT	TTTGTGTGAG	GTATAGACAG	TAGAGTGATA	CCGATACATG	AGGAAAATGA	240
GAACTGGAAT	GCAGGCCAAA	AGCTGGTCCT	TTCCAGATGA	ATGTAACCAA	GACTCGAG	298

(2) INFORMATION FOR SEQ ID NO:109:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 355 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:109:

GAATTCGGCC	TTCATGGCCT	ACACTCTCAA	ATATGTGGCC	TTTAACGGGA	CCAAAGTAGG	60
AAAGCAGATA	GTGGAAAACT	TCTCTCCAA	TCAGACCAAG	TTCACGGTGC	AAAGAACGGA	120
CCCCGTGTCA	CGTACCGCT	TTACCCTCAG	CGCCAGGACG	CAGGTGGGCT	CTGGGGAAGC	180
CGTCACAGAG	GAGTCACCG	CACCCCGAA	TGAAGCTTAC	ACCAACAACC	AAGCAGACAT	240
CGCCACCCAG	GGCTGGTTCA	TTGGGCTTAT	GTGCGCCATC	GCCCTCCTGG	TGCTGATCCT	300
GCTCATCGTC	TGTTTCATCA	AGAGGAGTCG	CGGCGCAAG	TACCCAATAC	TCGAG	355

(2) INFORMATION FOR SEQ ID NO:110:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 407 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:110:

GAAAAAAGTG	GGTCAAAGAA	TTACGGAAAA	TGTTGGGAAA	TGAAATCTGT	TTATGTATAG	60
TTGGTAATAA	AATAGACTTG	GAAAAGGAGA	GACATGTTTC	CATTCAAGAA	GCAGAGTCGT	120
ATGCAGAATC	TGTGGGAGCA	AAACATTATC	ATACTTCAGC	CAAACAGAAC	AAAGGAATTG	180
AGGAACTCTT	TCTTGACCTT	TGTAAGGGA	TGATAGAAAC	AGCACAAGTG	GATGAGAGAG	240
CAAAAGGCAA	TGGCTCTAGT	CAGCCGGGAA	CTGCAAGGCG	AGGTGTACAG	ATTATTGATG	300
ATGAACCTCA	AGCCCAGACC	AGTGGTGGAG	GGTGCTGTTT	TTCTGGATAA	CTGTTTCACGC	360
CTAAGAAATT	AAAAGACAGA	ACAAAAGTGT	GGATCATTGC	CCTCGAG		407

(2) INFORMATION FOR SEQ ID NO:111:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 395 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:111:

GAATTCGGCC	TTCATGGCCT	AAAAGAAAGT	ACATTAAAGC	AACTTGCATC	TCAAAACAAT	60
ACATTCTCT	GGTTGAAGTT	TTAGTGAAAA	TCGATTTATT	CCTCCTCTGA	GTTTACCCA	120
ATGGGTAAAG	TGTCTAAAT	ATGGGATTCC	TTAGAATCCA	TCCTCCTTCC	CAAGCATTTT	180
CCCATGTTTC	CTTCCACCCC	CAAATCTTA	CCCCATTCA	GGCAGAGCTG	AGCAAACATA	240
AGCCTTCTCT	GAAGTATTGA	GGGAAAGTCT	GCTAAACGGC	TAAACTACTT	AAGGAGCTAA	300
CAGAAAAGGT	TGTATCAGAG	AAACAGTGGA	GAAACACAGG	TTTCTAATTA	TATCTGGCAC	360
TGGAGAGAAT	GTCAAAGGTA	TTGGCCACGC	TCGAG			395

(2) INFORMATION FOR SEQ ID NO:112:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 301 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:112:

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GAATTCTAGA AACTACAGTA GTGGGACACA TAACATAGAA GTAATCGTCC AGGATTCTGC      60
TGGAAGAAGT AAGAGTGTTT ACCACATATT TTCTGTTCAA GAGAATAATC ATCTCAGTTT      120
TGATCCCTCG GCATCATTTA TTCTCCGTAC TGATCACTAC ATCATGGCCC GGGTCCTTTT      180
TGTCGTGATT GTGCTGAGCC AGCTCACCAT TCTCATTATT TTTAGATATC GAGGATACCC      240
AGAGCTTAAA GAACCTTCAG GGTTTATAAA TCTGACCTCA TTTTCTCTTC AATGTCTCGA      300
G                                          301

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(2) INFORMATION FOR SEQ ID NO:113:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 268 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:113:

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GAATTCGGCC TTCATGGCCT AAGCATGCTG TCTTGTGATG GTGATTTCAT GTGTTTTCTG      60
CATGGGATTA TTAACGGCAT CCATTTCCTT GGGCGTCAAG TTGTTGCAGG TGTCCACCAT      120
TGCGATGCAG CAGCAAGAAA AACTCATCCA ACAAGAGAGG GCACTGCTAA ACTTTACAGA      180
ATGGAAGAGA AGCTGTGCCC TTCAGATGAA ATATTGCCAA GCCTTCATGC AAAACTCATT      240
AAGTTCAGCC CATAACAGCA GTCTCGAG                                          268

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(2) INFORMATION FOR SEQ ID NO:114:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 260 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:114:

```

GAATTCGGCC TTCATGGCCT ACCCGCATCC CAGCTCTATT TAAAAAATA AAGAAGAAGA      60
TAATTCATTT CCTTAAGCTG CCCTTACACT ATTAGTCAGG AATGTTTGTG TTCACCTCCA      120
CTACATACCT TACGATCTCT TTTGCTTTGC TTTTTCAG TCAAGTCTCT ATTTATGAGG      180
TGGACAAGCA AGATTGTCGC AAATTTTGCA CTACTGGCAT CGATGGAGCC ATGACAATTT      240
GGGATTTCAA GACCCTCGAG                                          260

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(2) INFORMATION FOR SEQ ID NO:115:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 259 base pairs

- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:115:

GAATTCGGCC TTCATGGCCT AAACATTTTC TGAAAAACGT GATAGAAAGA AGGAGGAGCT	60
GTTTCTAGGA GGGAAATAAA TAATTTGGCA GGAGACTTTT TGAAGTAGAT ATCTATTGAA	120
TAACAAAGTG ACAATGTTCC CCATCCTCTC ATTTCCATTC CCAATTTTAC TTCTCGTCCC	180
AATTCAAATC ATTCTTACTT ATGATCGGCG CTATGTCAGT GCCTCTCAGC TGGTCTTCCC	240
AGACCCAGTC ACCCTCGAG	259

(2) INFORMATION FOR SEQ ID NO:116:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 238 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:116:

GAATTCGGCC TTCATGGCCT AATTACATTT ATGCAACCAA GCTATCAAAA GGACTGGCTG	60
TCCTTGGGAA TGAAACGTAA CAAAATCGTC AATAGAGTAT TATTGGAAAA GATGTTTTTC	120
AGTCATGAAC TAGCTATTTA AATGAGAAAA CAAATGTAAT GATGCTTTCT GTCATGATTT	180
TATAAATAAA TGTCAATTGT AGGAAATTGG AAAAATAAAT GAAAAAGAAA AACTCGAG	238

(2) INFORMATION FOR SEQ ID NO:117:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 279 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:117:

GAATTCGGCC AAAGAGGCCT ACCCTAGACC TGTTTTCTGT TCTCTACTCT TGAAATGCTA	60
ATGACCTTCA TGACCAGAGT CCGCTATTGC AGTTTGTGGT TGACAGGCAT CTCTCACTCA	120
CTGTGCTGCA ACTCAACTCT TTATCTTCAA CCAAACAGGG CCTCCCCGCA GCTTTCCCAC	180
TGCCACTCAG TGGCACTCCA TCCAGGGTTT CCAAAGTGTA AGACCCCGGA ATTTATCTTT	240
GACACTTCCA TCTCCCTCCA CCCCTCATCC AATTCATCA	279

(2) INFORMATION FOR SEQ ID NO:118:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 656 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:118:

GAATTCGGCC	AAAGAGGCCT	AGTTATAATG	ATGGAAGAAG	TGAAAAAACT	TTGTGATCGG	60
CTTGAACCTG	CAAGCTTACA	GTGCTTGAAT	GAAACACTCA	CATCATGCAC	AAAAGAATAG	120
GAAAGGCTGC	TTTGGAAAAA	CAGATAGAAG	AAATAAATGA	GCAAATCAGA	AAAGAGAAAG	180
AGGAAGCTGA	GGCTCGTATG	CGACAAGCAT	CTAAGAACAC	AGAGAAATCA	ACTGGTGGAG	240
GTGGAAATGG	AAGTAAAAAT	TGGTCAGAAG	ATGATCTACA	ATTACTAATT	AAAGCTGTGA	300
ATCTGTTCCC	TGCTGGAACA	AATTCAAGAT	GGGAAGTTAT	TGCTAATTAC	ATGAACATAC	360
ATTCTTCCTC	TGGAGTCAAA	AGAACTGCCA	AAGATGTTNT	TGGCAAAGCA	AAGAGTCTCC	420
AAAAACTTGA	CCCTCATCAA	ANAGATGACA	TAAATATAAA	GGCATTGAT	AAGTTCAANA	480
AAGAACATGG	AGTGGTACCT	CAAGCAGACA	ACGCAACGCC	TTCAGAACGA	TTTGAAGGTC	540
CATATACAGA	CTTCACCCCT	TGGACAACAG	AAGAACAGAA	GCTTTTGGAA	CAAGNTTTGA	600
AAACATACCC	AGTAAATACA	CCTGAAAGNT	GGGAAAANAT	AGCAGAAAGT	CTCGAG	656

(2) INFORMATION FOR SEQ ID NO:119:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 523 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:119:

GAATTCGGCC	AAAGAGGCCT	AGAGACAAAT	AGGTGATACT	GAATTTTATA	CTGTTTTCTA	60
CTTTTCCATT	AAAACATGG	CACCTCAATG	ATAAAGAAAT	TTAAGGTATA	AAATTAAATG	120
TAAAAATTAA	TTTCAGCTTC	ATTTCTGATT	TCGAANCAAT	CTANACTGTT	GTGATGAGTG	180
TATGTCTGAA	CCTGTAATTC	TTAAAANACT	TCTTAATCTT	CTAGAAGAAA	AATCTCCGAA	240
GAGCTCTCTC	TAGAAGTCCA	AAATGGCTAG	CCATTATGCT	TCTTTGAAAG	GACATGATAA	300
TGGGACCAGG	ATGGTTTTTT	GGAGTACCAA	GCAAGGGGAA	TGGAGCACTT	TAAGGGCGCC	360
TGTTAGTAAC	ATGAATTGGA	AATCTGTGTC	GAGTACCTCT	GATCTAAACG	GTAAAAACAAG	420
CTGCCTGGAG	AGCAGCTGTA	CCTAACATA	CTGTAATGTA	CATTAACATT	ACAGCCTCTC	480
AATTTCAGGC	AGGTGTAACA	GTTCTTTTCC	ACCAGATCTC	GAG		523

(2) INFORMATION FOR SEQ ID NO:120:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 111 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:120:

GAATTCGGCC	AAAGAGGCCT	AATTTCTTCC	TGTGATATGA	GAATTTCTTT	TCTTTCAGCA	60
GCTTTACCTG	CATTTGGCTT	TGGCTTTTGC	AATCGGCCCC	TCATTCTCGA	G	111

(2) INFORMATION FOR SEQ ID NO:121:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 579 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:121:

GAATTCGGCC	AAAGAGGCCT	AACCGCGGCC	GCTACTTCGG	CCTCTTTGGA	AAAAAAAAAG	60
TGAAAGAAAA	NATCACAATA	CAGGGAAAAG	TGAGCTAAAA	ATCCCGGCAT	TAAAAAGCCC	120
TTGATGTGGT	CCTGAATCGG	CTATTTCTAT	CTGTTCCCTG	AGCCTAACCT	CAGCGCTGGC	180
CTCTCTAAAC	CTCTTTTCAG	TCCTCTCAT	TTGAAAACAG	GGCCCATAC	ACATTCTCTG	240
AAAGCTTGCT	GAGTGATTTA	ACCACATAGT	CTAGGGGAGG	CACTCATCAA	ACATAAGGCC	300
TCTCTTTTGG	ATTTTATCC	TATAGTGGTA	TCTATCTAGA	GGCTGGTGAA	GACAGTGTGG	360
TGGAAGGAAA	GTGGGAAGGA	TACACTGAAA	TAGGACATAG	ACGTAGAGGG	GAGTCGATGG	420
TCATCTGGCT	TGATAGGGAA	AGTTAGAGAG	CTCTCCTGAA	CCACAGTTAC	AGAGCTTGGG	480
ATTATAACAC	ACACAGCCCC	AGAGAAAACA	CTTTGTTTAC	CATATTTTCT	CTTCTGCTGG	540
GGCTCTGGCA	CCTTAATTGG	TCAAAAGGCA	GCACTCGAG			579

(2) INFORMATION FOR SEQ ID NO:122:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 257 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:122:

GAATTCTAGG	AATGGGTCGG	GAAGTTGAGA	ATCTTATATT	AGAAAATACA	CAACTGTTGG	60
AAACCAAAAA	TGCTTTGAAC	ATAGTGAAGA	ATGATTTGAT	AGCAAAGTG	GATGAACTGA	120
CCTGTGAGAA	AGATGTGCTG	CAAGGGGAAT	TGGAGGCTGT	GAAGCAAGCC	AAACTGAAAC	180
TAGAGGAAAA	GAACAGAGAA	TTGGAGGAAG	AGCTTAGGAA	AGCTCGGGCA	GAAGCTGAAG	240
ATGCAAGGCA	ACTCGAG					257

(2) INFORMATION FOR SEQ ID NO:123:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 421 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:123:

GAATTCCTGT	AACTCGGAAA	AGATATCAGA	GGAATGTTG	TGGCATCAGA	GAGAAAGATG	60
AGAGCTCACC	AGGTGCTCAC	CTTCCTCCTG	CTCTTTGCTG	ATCACCTCGG	TGGCCTCTGA	120
AAACGCCAGC	ACATCCCAG	GCTGTGGGCT	GGACCTCCTC	CCTCAGTACG	TGTCCCTGTG	180
CGACCTGGAC	GCCATCTGGG	GCATTGTGGT	GGAGGCGGTG	GCCGGGGCGG	GCGCCCTGAT	240
CACACTGCTC	CTGATGCTCA	TCCTCCTGGT	GCGGCTGCCC	TTCATCAAGG	AGAAGGAGAA	300
GAAGAGCCCT	GTGGGCCTCC	ACTTTCTGTT	CCTCCTGGGG	ACCCTGGGCC	TCTTTGGGCT	360
GACGTTTGCC	TTCATCATCC	AGGAGGACGA	GACCATCTGC	TCTGTCCGCC	GGTCACTCGA	420
G						421

(2) INFORMATION FOR SEQ ID NO:124:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 123 base pairs
- (B) TYPE: nucleic acid

(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:124:

GAATTCTAGA CCTGCCTCGA GAAAATGAAA GTCTTTTCTC AAAAACTTC TTCCCAGGTC	60
TGTGAAGCAG CACAGTGGCC CTTTCTGGCT CTCACCTTGT ACCTCGTCCT TGTTCGCTC	120
GAG	123

(2) INFORMATION FOR SEQ ID NO:125:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 303 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:125:

GAATTCGGCC TTCATGGCCT AAGATGGCGT CTCACAAATC ATATGCCAAT TACTGAAATT	60
GGAGGTGAAA ATATTCTAGA TTTATTGTGG GATATATATA TTTTATGGTG TATGGCTCCC	120
AACACCATAT GCCACTGAAC TATATAAAAC TTTATGTCAG AACACTTACT TGTGTCATAT	180
GTAACCTCT TGCAAATAAT ATTCCCTTAC TACAGATCTG TCCCACTGT CTCAGAAAAT	240
AAAACATGGG AACGTTGGAA TGTCTCCTTG CTATAAGATA TTGAATTCTA GACCTGCCTC	300
GAG	303

(2) INFORMATION FOR SEQ ID NO:126:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 508 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:126:

GAATTCGGCC TTCATGGCCT ATGAAGACAA AGCTAACTTA CAAAAGCAGC TGGTTGAAGC	60
AATGAATACG CAATTAGAAC TTTCAGAACA ACTTAAATTT CAGAACAAC CTGAAGATAA	120
TGTTAAAAAA CTACAAGAAG AGATTGAGAA AATTAGGCCA GGCTTTGAGG AGCAAATTTT	180
ATATCTGCAA AAGCAATTAG ACGCTACCAC TGATGAAAAG AAGGAAACAG TTAATCAACT	240
CCAAAATATC ATTGAGGCTA ATTCTCAGCA TTACCAAAAA AATATTAATA GTTTGCAGGA	300
AGAGCTTTTA CAGTTGAAAG CTATACACCA AGAAGAGGTG AAAGAGTTGA TGTGCCAGAT	360
TGAAGCATCA GCTAAGGAAC ATGAAGCAGA GATAAATAAG TTGAACGAGC TAAAAGAGAA	420
CTTAGTAAAA CAATGTGAGG CAAGTGAAAA GAACATCCAG AAGAAATATG AATGTGAGTT	480
AGAAAATTTA AGGAAAGCCA CCCTCGAG	508

(2) INFORMATION FOR SEQ ID NO:127:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 713 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:127:

GAATTCGGCC	TTCATGGCCT	AGCGGCAGTC	CAGATCACGG	TTACTGTGAC	CTGACTGGAG	60
AAAAATTATG	TGTCTGCAAT	GATAGTTGGC	AAGGTCCTGA	TTGTTCTTTG	AATGTTCCCT	120
CTACTGAGTC	TTACTGGATT	CTGCCAAACG	TTAAACCCTT	CAGTCCTTCT	GTAGGTCGGG	180
CTTCACATAA	AGCAGTTTAA	CACGGGAAAT	TTATGTGGGT	GATTGGTGGA	TATACTTTTA	240
ACTACAGTTC	TTTTCAAATG	GTCCTAAATT	ACAATTTAGA	AAGCAGTATA	TGGAATGTAG	300
GAATCCATC	AAGGGGACCT	CTCCAGAGAT	ATGGACACTC	TCTTGCTTTA	TATCAGGAAA	360
ACATCTTTAT	GTATGGAGGC	GCCCCAAGGC	CCGACCCCTC	CCCCAAAGGG	GCAGTCCCCT	420
TCTTGACAGT	CTCAGCTTGC	GGGGTGGGGG	GAGTCATGCC	CAGGGGAGGA	GACTTTTTAT	480
CTGGAGGGGA	GAGAAGGATT	CTAGGGGTGT	GGAGTTGGAG	AAAGAGGCTT	CCTTGAGCCA	540
CCCTTCCAC	CCCAGCCCTT	GNTGGTCCCT	AGGCCAAGCC	ACCAAGTGAA	ACCTTCCAGG	600
ATACTAGCCC	GCCAGCTGTG	GGCCCCAGAA	AGCCAGCCTG	CCTTTTAGCA	CTTGATACA	660
CACAGACCCA	CGGAGCTCTC	TGTGTTTGGC	CTCTCACACA	CACACAACCT	GAG	713

(2) INFORMATION FOR SEQ ID NO:128:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 277 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:128:

GAATTCGGCC	AAAGAGGCCT	AAGAGATTCA	GGACCTGCAG	AGTCGCCAGA	AGCATGAAAT	60
TGAATCTTTG	TATACTAAAC	TGGGCAAGGT	TCCCCCTGCT	GTCATTATTC	CCCCAGCTGC	120
TCCTCTGTG	GGGAGAAGAA	GGAGACCCAC	TAAAAGCAAA	GGCAGCAAGT	CTAGTCGCAG	180
CAGTTCATTG	GGCAATAAAA	GCCCACAGCT	TTCAGGCAAC	CTGTCTGGTC	AGAGTGGAAC	240
TTCAGTCTTA	CACCCCAAC	AGACCTCCAC	AGTCGAG			277

(2) INFORMATION FOR SEQ ID NO:129:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 670 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:129:

GAATTCGGCC	TTCATGGCCT	AAGGCTACCG	ATATTGGAGA	AGCTAACTAT	GGGTTTTACC	60
ACACGTAACA	GCTTTTTGGT	GAAATCAGTT	GTTATACTAA	TAAGCTTTCC	TCTAATTGAT	120
TTGAGTTTGG	GTTTTTGTGT	TTGTATTTGC	GGGTTTTGTC	TCTTTTGTTC	TCTGTTTTTT	180
AGTAAATTGG	TTTTTCTTCA	ATGTATTTTC	TTAAAGTAGT	CTAGCTTTAC	CCAGTTTCCT	240
TGGCAAATTG	AAATTTAGGC	CATGAAGGCC	GAATTCGGCC	TTCATGGCCT	ACTCAGCCTC	300
CCCAAGTAGC	TGGGACTACA	GGCGTGTGCC	ACTATTCTCA	GCTGATTTTT	GTATTTTATG	360
TGGAGACGGG	TTTTTGCCAT	GTTAGTTGGC	CAGGATGGTC	TCTCTCTCGA	CGTCGTGATC	420
CGCCCGCCTC	GGCCTCCCAA	ATTGCTGTGA	TGACAGGCGT	GAGCCACCCC	GCNTGGCNTG	480
TCCTACCTCT	TTTTTAAGAC	CTCTTCCTGT	AAGCACTGGA	TAATCTACTT	CTAGTAATGT	540
GAAACTGACT	ATATNTTGAA	TTCATATGTT	TTCAATCAAC	CTGTTGCAGT	TTATATTTCA	600
CACCCTGCTC	CCTTTTGACA	GTTTAAGTAC	AGATAGTCTC	AGCAGTTCCT	GAGACCATGT	660
AAAGCTCGAG						670

(2) INFORMATION FOR SEQ ID NO:130:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 462 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:130:

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GAATTCGGCC TTCATGGCCT ACGACTCTGC TCTATTTACC ACTATCAGGC CAATCCTCCT      60
GACATGCTGT TAATATTTAG AAATATTTCT CCAACATTCA GAGTGCCTGG GTACCACACA      120
TGGATGCGAC TAAGATTCTT AAGTCTGGTT TCTAAGAGCT TCTTCAATGT CTCCAATAT      180
CTTTTCAGGC TCATGTTTGA GACCTTCCTT TCAAGAATAA TTTGCTTG TG ATCTGGTTCA      240
AGCTGAACAG AGATTTTCAG ATGACTCCCA AACTATCTGC AACACATCAG CCCTATTAAC      300
TCTTCTCAGA ATGCTCATAC AGAAGCCATG CCAGTGCACA AAAGCCACTT CTGACACCTG      360
GCCCTGTCTG ACTCATGGAT TTCTTCCAGG ATTGCTCTTT CTATCTGCTT TAAACCTCCT      420
TGTC AATTGA CTTTCCTTGG CTCCAACCC ACTTTACTCG AG                          462

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(2) INFORMATION FOR SEQ ID NO:131:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 535 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:131:

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GAATTCGGCC TTCGTGGCCT ANATATTCTA AGCATTCAAT TTGTCAGTTT CTGAGATTTT      60
CTTTCCATCT TAGTTTTTTA GAAGTCAGAA AATGACTTTT CACATTCACT TAGGGTATAT      120
AACAATGTTA ACGTAAGTTT ATGAGCTGAG TAGGTAGTTA ATAAACATCC TTTTAAGTTG      180
TAATGCTTTG AAATAGCATA TTAAAGGGTT GCAAGGGAAA ATTGGAACAT CAGTGTGAGT      240
TATTTTACAG TCATTTGTAG GTCTGTTTGT GACCTTGGCC TTTTCACACT TGTTGTCTA      300
TCACCTTTAG TATATTACTC TTTGGCACAG GTTGTCTAAT CACATTAATT TTTGCATCAA      360
AAATCCCTTG GTTTAGTGAT TCTTAATGAT GTTTATTTTG GAAAGTCATG GACCTGAATT      420
CTTTGAGTAG TTCATGAAAA CCATATACCT TTCCCAGAGA AATGGGGTGC ATATAATTTT      480
AGGAAGTTCA AGGTAGGGAA AACAAGCTAA AAATCCCAAC TTATTTTCATC TCGAG          535

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(2) INFORMATION FOR SEQ ID NO:132:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 401 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:132:

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GAATTCGGCC TTCATGGCCT AAGGGGATCA TCAAAGATGT TGGACACCTT GTGTTCAAAT      60
CTTGGTTTCAG GTGCGGCCTG TGCAGATCGG CTTTTTGGTT TGGTTGTCTT GGCCTGGATA      120
CCAGTGGAGA AGATGTCATC CATATCATCA TCAAATATAG ACTTGGTTTC CACTTTCTTT      180
TTGGACTTTT CTTTGTGTTT TACAGTTAAG TCAGCAAAGA TATCAATGTT ATCATCAAAT      240

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AAATTAGATT CCAATGTTTT CTCCTTCTCT CTGGTTTTCT GAGAGGGTTT AATTGCTTCC	300
GTAGCAAATA TATCATCCTC AAAAATATCT TGTGTTGTTA ATATGACATC CTGCTGACTA	360
CTGGATTTTG TCTATTCTT CTGACTTTC TGATCCTCGA G	401

(2) INFORMATION FOR SEQ ID NO:133:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 497 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:133:

GAATTCGGCC TTCATGGCCT AGTAGATGAA CTAGAAGATG GATAAACGAA GATAGATAAA	60
ATGAAGAAAA ACAAAGTCA AGGAGAACTC AGGCGTCCAA GAGTGTGTAA ACAACTTCTG	120
GTGTGAGACG CGCTACATTG CGCTAAATGG CCTGTGCGCT TCTGGTTTTT CCCTTCCTCT	180
GTTGATTTTT TATAGTTGTC TTTTATTTTA AACACGCCTC CCCCCCCCCT TTTTAAACTG	240
ATTTTACCAT CACTCTCTCT AGCCCTGCCT CCCTAGAATT AGCTGCTTCT TACCTCCCTT	300
GGATCTGGAA CTTAAATATT AACGTGTATA TAAGTTAATA GTAAGTAGAC CGTGAATTTA	360
GAAGAGTAAA ACAGAATCAT GAGTACGTAG TCACTGTGGC CCCTTTTTTG CTGGATTTC	420
AGTTCGTAAG CATTTTTTGA AGAGAGTCGA AGGGGAAGGG GTGGCTTGCC AGTCAGTTGA	480
GTGATGCATG GCTCGAG	497

(2) INFORMATION FOR SEQ ID NO:134:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 362 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:134:

GAATTCGGCC TTCATGGCCT AGGCTGGTCA TTGAGAGTGT TGGTGCACTC AAAGTGGAAC	60
ACGATGTGAT TGGTAAACAT GTGCTTGATA CATCGAACAA AATATTCTGT CTCTGCTTCT	120
GTAAGTTGAA CAGGCTCAGA AGACTTGAAC AAGGGTCCTA TATTCAGAAA CTCAGGAATG	180
GCAGCCAATT GTTCTTGGGG ATATATTCT AATGAAGTGC TAGACTATCC AATTACTTAA	240
TTTCTTATAC CTTTAGATAA TCAGTATGAA AAGTTCCCAT TTATAATGGA AATGAAAATT	300
CTTAATAAAA CTATACATGT AATATGTATT TCTAGAAGAG AATAAAAAACC CAAGTCTCTG	360
AG	362

(2) INFORMATION FOR SEQ ID NO:135:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 377 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:135:

GAATTCGGCC TTCATGGCCT ACCCCAATCA ATGGATCCTC AACTCCAAAT CCAAAGATAG	60
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CATCTTCTGT	CACTGCTGGA	GTTGCCAGTT	CACTCTCAGA	AAAAATAGCC	GACAGCATTG	120
GAAATAACCG	GCAAAATGCA	CCATTGACTT	CCATTCAAAT	TCGTTTTATT	CAGAACATGA	180
TACAGGAAAC	GTTGGATGAC	TTTAGAGAAG	CATGCCATAG	GGACATTGTG	AATTTGCAAG	240
TGGAGATGAT	TAAACAGTTT	CATATGCAAC	TGAATGAAAT	GCATTCTTTG	CTGGAAAGAT	300
ACTCAGTGAA	TGAAGGTTTA	GTGGCTGAAA	TTGAAAGACT	ACGAGAAGAA	AACAAAAGAT	360
TATGGGCCCA	CCTCGAG					377

(2) INFORMATION FOR SEQ ID NO:136:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 333 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:136:

GAATTCGGCC	TTCATGGCCT	AAGCAAACCT	CATGCAGCTG	GTGGAAGTAG	ATGTGTCTCG	60
AAATGAGATT	CCTGAAATTC	CAGAAAGCAT	TTCATTCTGT	AAAGCACTGC	AGGTAGCTGA	120
CTTCAGCGGA	AACCCACTGA	CTAGGTTGCC	AGAAAGCTTT	CCTGAATTAC	AGAATTTAAC	180
ATGTCTTTCT	GTAAATGACA	TCTCACTACA	GTCTCTACCT	GAAAATATTG	GCAATCTTTA	240
TAACCTGGCT	TCACTGGAAC	TGAGAGAGAA	TCTTCTTACA	TATCTTCCTG	ACTCTCTTAC	300
CCAGCTGCGA	AGACTAGAAG	AACTTGACTC	GAG			333

(2) INFORMATION FOR SEQ ID NO:137:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 309 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:137:

GAATTCGGCC	AATGAAGCCT	ACTTTAGTAT	TTTGGCACTT	CCTAATTGAC	ACCTGGGGAG	60
ACTGCAGGAA	GGGAACGAGA	ATCATTNNTA	GGNTATTTGT	GTGTGTGTGT	GGTTTTTTTT	120
TTTTTTTGGG	AGACAGAGTC	TCACACTTTT	GCCCAGGCTG	GAGTGCAGTG	GCGTGATCTC	180
GGCTCACTGC	AACCTCTGCC	TCCAGGGTTC	AAGCGATTCT	CTTGCTCAG	CTTCCCGAGT	240
AGCTGGGATT	ACAGGCACAC	GCCACAACGC	CTGGCTAATT	TTTATATTTT	TAGTAGAGAC	300
AGTCTCGAG						309

(2) INFORMATION FOR SEQ ID NO:138:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 599 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:138:

GAATTCGGCC	AAAGAGGCCT	AAACTCAGAA	TGGTGCTACT	TGAAGACTCT	GGATCTGCTG	60
ACTTCAGAAG	ACATTTTGTC	AACCTGAGTC	CCTTCACCAT	TACTGTGGTC	TTACTTCTCA	120

GTGCCTGTTT	TGTCACCACT	TCTCTTGGAG	GAACAGACAA	GGAGCTGAGG	CTAGTGGATG	180
GTGAAAACAA	GTGTAGCGGG	AGAGTGGAAG	TGAAAGTCCA	GGAGGAGTGG	GGAACGGTGT	240
GTAATAATGG	CTGGAGCATG	GAAGCGGTCT	CTGTGATTG	TAACCAGCTG	GGATGTCCAA	300
CTGCTATCAA	AGCCCCTGGA	TGGGCTAATT	CCAGTGCAGG	TTCTGGACGC	ATTGGATGG	360
ATCATGTTTC	TTGTCGTGGG	AATGAGTCAG	CTCTTTGGGA	TTGCAAACAT	GATGGATGGG	420
GAAAGCATT	TTGCAATCAC	AATGAAGATG	CTGGCGTGAC	ATGTTCTGAT	GGATCAGATC	480
TGGAGCTAAG	ACTTAGAGGT	GGAGGCAGCC	GCTGTGCTGG	GACAGTTGAG	GTGGAGATTC	540
AGAGACTGTT	AGGGAAGGTG	TGTGACAGAG	GCTGGGGACT	GAAAGAAGCT	GAACCTCGAG	599

(2) INFORMATION FOR SEQ ID NO:139:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 541 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:139:

GAATTCGGCC	TTCATGGCCT	AACCTTCCTG	AATATCTGCC	GTTTGTCTCTG	CAAGAAATAA	60
CTAGTCAACC	CAAAAGGCAG	TATCTTTTAC	TTCATTCTCTT	GAAGGAAATT	ATTAGCTCTG	120
CATCAGTGGT	GGGCCTTAAA	CCATATGTTG	AAAACATCTG	GGCCTTATTA	CTAAAGCACT	180
GTGAGTGTGC	AGAGGAAGGA	ACCAGAAATG	TTGTTGCTGA	ATGTCTAGGA	AAACTCACTC	240
TAATTGATCC	AGAAACTCTC	CTTCCACGGC	TTAAGGGGTA	CTTGATATCA	GGCTCATCAT	300
ATGCCCCAAG	CTCAGTGGTT	ACGGCTGTGA	AATTTACAAT	TTCTGACCAT	CCACAACCTA	360
TTGATCCACT	GTTAAAGAAC	TGCATAGGTG	ATTTCTCTAA	AACTTTGGAA	GACCCAGATT	420
TGAATGTGAG	AAGAGTAGCC	TTGGTCACAT	TTAATTCAGC	AGCACATAAC	AAGCCATCAT	480
TAATAAGGGA	TCTATTGGAT	ACTGTTCTTC	CACATCTTTA	CAATGAAACA	AAAGTCTCGA	540
G						541

(2) INFORMATION FOR SEQ ID NO:140:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 403 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:140:

CTTCATGGCC	TAGTGGTTCT	TCTGAAATCG	GCCTTCAGAC	ACCTGTCTT	GGTAGTACCA	60
ATATCTAAGA	AGTGGTTTCA	GTTCAATTTT	GTTTTCTCTC	ATGCCAGAGA	GAAGCCACAG	120
TTTCCTAAGC	TGGGGAGGAG	GTATATCCTT	CAAGAGATCG	GCTTGTTAGA	ATAGACCACT	180
TAACACCATA	TGAAAAAGCA	ACAGACTGAA	ACATGGATGT	CCTCAAGAAG	GGCTGCTGAC	240
ACCTATGATT	TGGCAAGGAG	ATAAATAACA	GAATGTGCAA	AGGGTCATAA	GAGTGCAGAC	300
ACCCTAATGT	CTGTTGGCTG	GAAGGTCAGA	GCAGTTCACC	AGTGAAAATG	GGTACGCCAT	360
GAAGGCCGGC	CTTCATGGCC	TATAGGCCAT	GAAGGCCGAA	TTC		403

(2) INFORMATION FOR SEQ ID NO:141:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 439 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:141:

GAATTCGGCC	TTCATGGCCT	AGTCCTCATC	TGCTGGCATT	TTGTGGGGTG	TTAGTGCCAA	60
ACTTGAATAG	GGGCTGGGGT	GCTGTCTTCC	ACTGACACCC	AAATCCAGAA	TCCCTGGTCT	120
TGAGTCCCCA	GAACCTTGCC	TCTTGACTGT	CCCTTCTCTT	CCTACCTCCA	TCCATGGAAA	180
ATTAGTTATT	TTCTGATCCT	TTCCCTGCC	TGGTCTAGCT	CCTCTCCAAA	CAGCCATGCC	240
CTCCAAATGC	TAGAGACCTG	GGCCCTGAAC	CCTGTAGACA	GATGCCCTCA	GAATTGGGGC	300
ATGGGAGGGG	GGCTGGGGGA	CCCCATGATT	CAGCCACGGA	CTCCAATGCC	CAGCTCCTCT	360
CCCCAAAACA	ATCCCGACAA	TCCCTTATCC	CTACCCCAAC	CCTTTGCGGC	TCTGTACACA	420
TTTTTAAACC	TGGCTCGAG					439

(2) INFORMATION FOR SEQ ID NO:142:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 292 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:142:

GCGATTGAAT	TCTAGACCTG	TGTGTCTAGC	TGTGATGGAA	TCTGAAATGA	AGTTTGACAA	60
GGACCATGAT	GGACTCATTG	AAAATGGAGG	CTATGCAGAC	CAGACCTATG	ATGGATGGGT	120
GACCACAGGC	CCAGTGCTT	ACTGTGGAGG	GCTGTGGCTG	GCAGCTGTGG	CTGTGATGGT	180
CCAGATGGCT	GCTCTGTGTG	GGGCACAGGA	CATCCAGGAT	AAGTTTTCTT	CTATCCTCAG	240
CCGGGGCCAA	GAAGCCTATG	AGAGACTGCT	GTGGAATGGC	CGCTTACTCG	AG	292

(2) INFORMATION FOR SEQ ID NO:143:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 457 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:143:

GAATTCGGCC	TTCATGGCCT	AGGGAGGCTG	AGGTGGGAGG	CTCACTGGAG	GCCAGGAGTT	60
CGGAACCAGC	CTGAGCAACA	TAGGGAGACC	TCAGCTCTAC	AACTGAAAAA	AAGATAGCCA	120
GGTGTGTTCA	TGGTGGCACC	TGTCTGTATT	CCAGCCGCTT	GGGAGGCTGA	GGCAGGAGGT	180
TTGCTTGAGT	CCAGGAGTTT	GAGGTTGCGG	TGAGCTACAC	AATGAGCTAT	GGTGGCACTA	240
CTACACTCCA	GCCTGGGCCA	TAGAGTAAGG	CCCTGTCTCT	AACTGGAAGT	CCAAAGAGGG	300
ATCTACTTCC	TAGACTATTA	ATTTAATAGA	TCAATAAATT	AATCAAGAAT	ATGATTTTTT	360
TCTCATCTTT	CTCTGTAGTC	ATATTTTATA	CAGACTTTTT	GTTTAAGTAA	TCTCTCTTTA	420
TGGGCAGACA	ATGATTTTCA	AAACACCCTG	CCTCGAG			457

(2) INFORMATION FOR SEQ ID NO:144:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 388 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:144:

GAATTCGGCC	TTCATGGCCT	AGTCAGCCGT	GACTGCACCA	CCATACTCCA	GCCTGGGTGA	60
CAGAGCGAGA	TCTTGCTTA	AAACAAAACA	AAACAAAACC	CAGACTTCCT	ATAATTCCTA	120
AAAATAAATG	TGGGTTTGAG	AGGCCTACCT	TGAAATGTAC	AAGATCCTGG	CCAGACTTCA	180
CCTATCTAAC	AATATGCTAG	TAACTATTTG	TTGACATGTC	TTAAAGAAAT	GTTTCATCAGG	240
GCCTCAGAAA	GCAAGGCAGA	GAACAGGTCC	CTGAAATTTA	CTAGCTTGCA	CCAAACCATC	300
AGATAAAGAT	AGGTTAATAT	TTGACAGAAA	AAACTCTTCA	AAAAGAGACA	GTGAAATACT	360
CTTGAGATGA	ATCCAGGCGG	CTCTCGAG				388

(2) INFORMATION FOR SEQ ID NO:145:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 303 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:145:

GAATTCGGCC	TTCATGGCCT	AGGCAGTGGA	GGCCTCTGTA	ATTCTAGCAT	ACAGGTGGCA	60
AGTTATTACA	TTATTTCTTT	CCTCCTGTCT	ACCTGCAGTT	GGTTTTATGT	GGGGCGTTAG	120
TACACTTCCC	AAAGGGCTTG	CCCGCAGGTG	AGAGGTGCAC	ATTGAACTCC	CTCACCAGGC	180
AGATGGGAAG	TGTGGCCATG	AGAGAGAGCT	TCAGGGGCCC	TGGGTTTATG	ACATCGCTGG	240
GCCAGGAATG	AGGTTAATAT	TTTAAATGGC	GAAGGGTGAG	CCCCGTTATT	ACCCGAGCTC	300
GAG						303

(2) INFORMATION FOR SEQ ID NO:146:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 376 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:146:

GAATTCGGCC	TTCATGGCCT	ACTGGATGGC	ATCTACTTCG	TATGACTATT	GCAGAGTGCC	60
CATGGAAGAC	GGGGATAAGC	GCTGTAAGCT	TCTGCTGGGG	ATAGGAATTC	TGGTGCTCCT	120
GATCATCGTG	ATTCTGGGGG	TGCCCTTGAT	TATCTTCACC	ATCAAGGCCA	ACAGCGAGGC	180
CTGCCGGGAC	GGCCTTCGGG	CAGTGATGGA	GTGTCGCAAT	GTCAACCATC	TCCTGCAACA	240
AGAGCTGACC	GAGGCCCAGA	AGGGCTTTCA	GGATGTGGAG	GCCCAGGCCG	CCACCTGCAA	300
CCCACTGTG	ATGGCCCTAA	TGGCTTCCCT	GGATGCAGAG	AAGGCCCAAG	GACAAAAGAA	360
AGTGAACAA	CTCGAG					376

(2) INFORMATION FOR SEQ ID NO:147:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 412 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:147:

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GAATTCGGCC TTCATGGCCT AATGGAAAGG ACAAGGAAAA GGGAGAAGGG GTGAGAGTCT    60
GTCCTAGGGG CCAACGAGAA CAGTGAGCTG TTTCAGGGGA GCCATTTCTT TGTCCATGCT    120
CACAAGCCTG TGGATTCTTC CCCCTCTGCA GGAAATTACC TGATGTTCCA AACCCCTCTC    180
AGATCCTGTA TATCCGAGC ATCTCCCCTT TCCCTGAGCT GGAACAGTTT CTACAGGACA    240
CTATCAAGAG GTACTAGGGG CCTGGAGGTT TGGGCTCCAA GAGAAGCTTG ACAGAGCCCA    300
CGCCCCACCC CTACTTCTGT TTCTTCTTAA GGTATAATCT GCAGATGTTG GAAGCTGAGG    360
GCAGCATGAA GCAGGCCCTG GGTGAAGTGC AGGCACAGCA GCCCCCTCG AG              412

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(2) INFORMATION FOR SEQ ID NO:148:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 335 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:148:

```

GCCTGGCCAT CCGGAGAGCT AAGAACCTCA GCGGCTGCT GTACGTNTCA TGCAACCCCC    60
GGGCGACCAT GGGCAACTTT GTGGACCTCT GCAGAGCCCC ATCTAACCGG GTGAAGGGCA    120
TTCCCTTCCG GCCGTCAAG GCTGTGGCAG TGGACCTGTT CCCGAGACC CCTTCTTTTT    180
TCATACTTAT ATGAAAGACT ACATACTTAA AATACTGGTG ATTATATTTA GGACCTGAAA    240
TCATAAGATT GTGGTCTTGC TTTTACTTA TTTTGTATC TTAGCGATGT CTAGAGTTAA    300
TAAGTGTGTC TTTTCTAATC ACAGCAAATC TCGAG              335

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(2) INFORMATION FOR SEQ ID NO:149:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 482 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:149:

```

GGATTCGGCC TTCATGGCCT AGTGGGAC TAGGATCATC ATTTGGGTGA GAGCCCTCGG    60
CAATGGTGGA GAGGGAGAAG TTATCATTGT GGAGCTCAGA TGGGGTCCGG AATTTGTTGG    120
TCCTACGCAG CTTGGTATTC TCCGTCTTGA GCAGGTAGAG CTTCTTGGCA AAGAACACCG    180
TCATCATGAA GAGCAGGAGC AGGACGAGGG CAGCCGAGCC CACGGCCACG CACATCACCT    240
GGAAGTCGGT GATGATGGAC TCGCAGCGCA TCCCCTTGTT CCAGATGTAG TCCTGCGTGT    300
TGCACCTGCA GAAGGCCCCCT ATGTTCTCCA CCAGGTAGCA CTGGCCGCCA TTGTGACAGT    360
AACTTGGGAA GAGGTCGCAC ACTGACCGGC AGGAGCCGTT ATGCCGCACA AAGCCACTGC    420
GGCACTCAGT GCCATTTTCA CTGGAGGCCA AGTCCCTGCC TGGCTCTCCT TAGGCCATGA    480
AG              482

```

(2) INFORMATION FOR SEQ ID NO:150:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 277 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double

(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:150:

G TTCCTTACT AACTTTAATG GCCACAACAT TTAGGCGAAA GGGGGGCAAT CATTGGTGGT	60
TTGGCATTTC CAGAGACTTC TGTCAGTTTC TGCTTGAAAT TTTCCCATTT TTAAGAGAAT	120
ATGGGAACAT TTCATATGAT CTCCATCAGC AAGATAGTGA AGATGCTGAA GAAACATCAG	180
TTCCAGAAGC TCCGAAAATT GCTCCAATAT TTGAAAAGAA GGCCAGAGTA GTTATAACCC	240
AGAGCCCTGG GAAATACGTT CCCCCCTCT CCTCGAG	277

(2) INFORMATION FOR SEQ ID NO:151:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 272 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:151:

G CTCGCCAC TTTATGAAGA GCGATTTTAC GGCTGCTTGA ACCATTCGAA TTTGGATTTG	60
TGTTCCAGCAC TTAAAGGT TCAACTTTTT GCTTCTACCC AGATTGGTCT CAGGTCTGTC	120
TTCTCCAGAT GACCGGTGGT TTCCTGAGCT GCATCTTGGG CTTGGTGCTG CCCCTGGCCT	180
ATGGCTTCCA GCCTGACCTG GTGCTGGTGG CGCTGGGGCC TGGCCATGGC CTGCAGGGCC	240
CCCACGCTGC ACTCCTGGCT ACAATACTCG AG	272

(2) INFORMATION FOR SEQ ID NO:152:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 308 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:152:

GAATTCGGCC TTCATGGCCT AGGGGCGGTG AAACGTCCTG AAGAGCGTCC AGCTCGTGGC	60
CGAGAGGACT CGGGCGCTCC CCACGCTGGA GGCCGTGGAC CGCTCCCTTT AAAAGTTGAA	120
ACGGCCGCCG TTCGGGACGG CTTGGCGGGA GGAGGGCCCG ACGAGGGGAG GCTTCAGGGA	180
CAACTGGGGC TTCTCGACGT CCACCCTTTT CAGGGCGCGG CCCCAGTAGC CCTCGGGCCG	240
GCCCAGGTAC AGGAGGTGCT TCCGGGACC CCCGGAGTAC CTGGAGGGAC CTCCGAGGG	300
GACTCGAG	308

(2) INFORMATION FOR SEQ ID NO:153:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 438 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:153:

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GAATTCGGCC TTCATGGCCT ACAATCCCAA ATGTAGGATC ATGCCCATTG CCCTAAGCCC      60
AGGCATGAGA GTCGACATCT CTCCTCTTAT ATACAGATCC AGTCCACAGG TGAAGTGGGA      120
ACTCTCCAAC CAGGATTGAG CACACCATTG ATGTTGCGAC TCCTCTACTG GAACACAGCT      180
TGGAGAAGGG ATTGGGGCTC TCATGGCAGG ATGCAATCCA CTGTTGAGAT TGTGACTCAT      240
GCACTTGAAC CTAAGTCTCA GGAGTTGTTG ACTCTTACAC CCAGCACCCA GGTGATAGGA      300
CTCTCATGTC TGGTTCCTGC CCACAGGTGA AATTGTGACA TATACATGGT CACAGCTCAC      360
AGGTGAGGTG ATAACTCACA TACCTGGATC CAGCTAAGAG AACAGATTTT GACTCTGATA      420
TCTTAGGCCA TGAAGGCC                                     438

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(2) INFORMATION FOR SEQ ID NO:154:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 297 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:154:

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GAATTCGGCT TCATGGCCTA CAAGATGACT AAAGTCTTCA CTCACCAAGG AAAAGTGGCT      60
CTGTATGGCA AGCTGGTGCA GTCAGCTCAG AATGAGAGGG AGAAACTTCA AATAAAGATA      120
GATGAGATGG ATAAATACT TAAGAAGATC GATAACTGCC TCACTGAGAT GGAAACAGAA      180
ACTAAGAATT TGGAGGATGA AGAGAAAAAC AATCCTGTGG AAGAATGGGA TTCTGAAATG      240
AGAGCTGCAG AAAAAGAATT GGAACAGCTG AAAACTGAAG AGGAGGATGC TCTCGAG        297

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(2) INFORMATION FOR SEQ ID NO:155:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 395 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:155:

```

GAATTCGGCC TTCATGGCCT AAATTTAGGA AGGTCAAACG TGAATCTCCA TTTGACAAAC      60
GTCCAACCTGC AGCAGAGATT AAAGTGGAAAC CCACCACTGA GTCATTGGAC AAAGAGGGCA      120
AAGGTGAAAT TAGAAGCCTA GTGGAGCCAC TCAGTATGAT CCAATTTGAT GATACTGCTG      180
AGCCACAGAA AGGAAAAATA AAAGGAAAGA AACACCATAT CTCTTCAGGA ACTATCACAA      240
GCAAAGAAGA AAAAAGTGA GAGAAGGAAG AGTTGACCAN ACAAGTCAAG TCTCATCAAC      300
TTGTTAAATC ACTCTCAAGA GTGGCTAAAG AGACTTCAGA ATCTACCAGA GTTCTAGAAA      360
GTCCAGATGG CAAAAGTGAA CAGCGTAACC TCGAG                                     395

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(2) INFORMATION FOR SEQ ID NO:156:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 422 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:156:

GAATTCGGCC	TTCATGGCCT	ACAGAGTACT	GAGTGAACA	TACGATGATA	GATTTACAAA	60
TAATGTAGCA	TACTTCTACT	TCATTGTATC	TAAAGTTTCT	TGAAATATTG	CTACTGGAGA	120
TTGGAAAGAA	ATCTTAATGT	TATGGGGTAT	TGTCTAAGAA	GCTTTATTTT	AAAACCATCT	180
CATTAAATTT	TGTTGCATT	TAGATAATCG	TCCCCAGATG	CCATGTTACC	CTAGTGCAGA	240
GTTTGGGGCT	GGATAAGTTT	TTGTTGTAGG	TGGCTATCCT	GTGTTTGTGA	GGGTATTTAG	300
CAGCATCCTG	GCCTTAAAAC	AAAAATGTTT	TCAGACATTG	CCAAATGTCC	CCCAGCGGT	360
AAAGTCACCC	CCAAGTTGAG	AACCGCTCTA	TACAAAGAGC	TGTTATTAGA	GCCAGACTCG	420
AG						422

(2) INFORMATION FOR SEQ ID NO:157:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 492 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:157:

GAATTCGGCC	TTCATGGCCT	AGATTGCTTG	AGGCCAGAAG	TTCAAGACAG	GCTGCCCAAC	60
ATAGTGAGAC	CCCCTTCTCT	ACCAAAATTT	TAAAAATGAG	CATGCATCTG	TAGTCCTAGC	120
TATTGGGAAG	GCTGAGGCAG	GAGGATCATC	TGAGCCCAGG	AGTTTGAGGC	TGCAGTGAGC	180
TAAGAAGGTG	CCACTGCACT	GCTGTTGTCT	CTCAGCAGAT	CATTTTCAGC	TTTCTTTGGA	240
GAGTAGCCAT	TAGCAATGCA	AATGTGAAGT	TTGATAGCAC	AATAAATAAA	ACACTGAAAA	300
CTGTAGATGT	TACTTATAAA	ACACTGGCAC	TCAGATAAAT	TGGGTTTGGT	CAAGAAGACA	360
GTGAAGCATA	TCCCTGTTGG	GCCAGAGGCT	GTTATCGTTT	TGCTCTGAAT	TCAAAACCTG	420
ATATGTCTCC	AAATTTGCTT	AGGGTTGTTA	TCCTGAAAAA	TAGAATCTGA	TAGAAGGTGG	480
GCACATCTCG	AG					492

(2) INFORMATION FOR SEQ ID NO:158:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 505 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:158:

GAATTCGGCC	TTCATGGCCT	ACTGCTTTCG	TGAAGACAAG	ATGAAGTTCA	CAATTGTCTT	60
TGCTGGACTT	CTTGAGTCT	TTCTAGCTCC	TGCCCTAGCT	AACTATAATA	TCAACGTCAA	120
TGATGACAAC	AACAATGCTG	GAAGTGGGCA	GCAGTCAGTG	AGTGCAACA	ATGAACACAA	180
TGTGGCCAAT	GTTGACAATA	ACAACGGATG	GGACTCCTGG	AATTCCATCT	GGGATTATGG	240
AAATGGCTTT	GCTGCAACCA	GACTCTTTC	AAAGAAGACA	TGCATTGTGC	ACAAAATGAA	300
CAAGGAAGTC	ATGCCCTCCA	TTCAATCCCT	TGATGCACTG	GTCAAGGAAA	AGAAGCTTCA	360
GGGTAAGGGA	CCAGGAGGAC	CACCTCCCAA	GGGCCTGATG	TACTCAGTCA	ACCCAAACAA	420
AGTCGATGAC	CTGAGCAAGT	TCGGAAAAAA	CATTGCAAAC	ATGTGTCGTG	GGATTCCAAC	480
ATACATGGCT	CAGGAGATGC	TCGAG				505

(2) INFORMATION FOR SEQ ID NO:159:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 373 base pairs

(B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:159:

GAATTCGGCC	AAAGAGGCCT	AGCCGGAGCA	GCTGTCTGGG	AGTCAAGGCT	GCAGTAGCGT	60
TTCTTCATGG	GGTGCTCCAG	GGGGTGCCAC	AGACCGACAG	GCAGCCCAAG	GGCCTGGACA	120
CCCCTCCCCA	GGCAGGTGCT	GCCCCAGGAG	GACTGTCTCT	GGGAATGAAC	CTCCCGCGGG	180
CTTTGGACTG	AGGTCCCTGT	GGCCTCGGTC	TCCTCCCCAT	GAAGTGGGAG	CGAGGCTCCC	240
CAATGGTGCT	TTTGGCTTTA	GTGTACGATG	TTTGCTGTGC	TTCCCGCCGT	GGAGGGCAGA	300
GCCACCCAC	ATCAGGATCG	GACGTGCTAC	CCCTCCCGGT	CCCGGCCCTG	GCCCAGCCAG	360
CCCAGCCCTC	GAG					373

(2) INFORMATION FOR SEQ ID NO:160:

(i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 362 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:160:

GAATTCGGCA	AAGAGGCCTA	ATGAATTCTC	TGATCACAAA	ACAGACCCAG	GAAAGCATTTC	60
AGCATTTTGA	GCGACAGGCA	GGGCTGAGAG	ATGCTGGCTA	CACACCCAC	AAGGGCCTCA	120
CCACCGAGGA	GACCAAGTAC	CTTCGAGTGG	CCGAAGCACT	CCACAAACTA	AAGTTACAGA	180
GTGGAGAGGT	AACAAAAGAA	GAGAGGCAGC	CTGCATCAGC	CCAGTCCACC	CCAAGCACCA	240
CTCCGCACTC	TTACCTAAG	CAGAGGCCCA	GGGGCTGGTT	CACTTCTGGT	TCTTCCACAG	300
CCTTACCTGG	CCCAAATCCT	AGCACCATGG	ACTCTGGAAG	TGGGGATAAG	GACGGGCTCG	360
AG						362

(2) INFORMATION FOR SEQ ID NO:161:

(i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 419 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:161:

GAATTCGGCC	AAAGAGGCCT	AGTTTTACAA	AACGCGATTT	GTAATATAAA	CTAGTTAGAT	60
AACTCAGAGG	GTTTTATTGG	CCATATTTTT	GTTTATGCTT	TGTCACAGGC	TTTAGTCATT	120
GCTTCCATGT	GTTTTCATCC	TTCAGGATAT	CTTCAAGAAG	CCTACTTATG	GACCAAACAA	180
GTTCTGACCA	TCATGGAGAA	ATCTCTGGTC	TTGCTCAGGG	AGGTGACGGA	TGGCTCCCTC	240
TATGAAGGAG	TTGCGTATGG	CAGCTACACC	ACTAGATCAC	TCTTCCAATA	CATGTTTCTC	300
GTCCAGAGGC	ACTTCAACAT	CAACCACTTT	GGCCATCCGT	GGCTTAAACA	ACACTTTGCA	360
TTTATGTATA	GAACCATCCT	GCCAGGTATA	GTGAGGAGTC	AGAAGTGTGA	AAACTCGAG	419

(2) INFORMATION FOR SEQ ID NO:162:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 261 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:162:

GAATTCGGCC AAAGAGGCCT ACAGGTAGTA TCTTTATAGC GGTATAAAAA CAGACTAATA	60
CAAACAGGTA GCTCTAAATT GTGAGTTTTT CTTAACTCCT TTGATCTTCT GTGATAGCGA	120
TTTTTCACAT TTCACACTTC CCTAATGCCA AAAATCCACC TCCAGCAGCT GTTTTGCCTC	180
TTTCTTATCC TGCCCCTTGG AAGAATGTCA TCATTATTGC TGCCACAGCA CTGTGTTCTT	240
TTTCAGAAGT TACAGCTCGA G	261

(2) INFORMATION FOR SEQ ID NO:163:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 108 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:163:

GAATTCGGCC AAAGAGGCCT AGTGGTCTGG GGCAAAATTT AGTAAGACCT GGAAAGCATA	60
GGTAATCAAA GCAGAACTG ACAAATGAGA TGGTATCAAG CTAAAAAG	108

(2) INFORMATION FOR SEQ ID NO:164:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 292 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:164:

GAATTCGGCC AAAGAGGCCT AGTTTAACCT CATCAGACAT TATTGCAGCC AGCTGTCAGC	60
CAAGCTCAGT AACCTTCCAA CGCTCATTTT CATGAGGCTA GAGTTCC1GA GAATCCTCTG	120
TAGCCATGAG CATTACCTCA ATCTGAACCT TTTT1TTATG AATGCTGATA CTGCTCCAAC	180
ATCTCCTTGT CCTTCCATAT CTTCCAGAA CTCAAGCTCC TGCTCCAGCT TCCAGGACCA	240
GAAGATCGCC AGCATGTTTC ATCTGACTTC CGAGTACCGC CAGCCCCTCG AG	292

(2) INFORMATION FOR SEQ ID NO:165:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 135 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:165:

GAATTCGGCC AAAGAGGCCT AGCAAAACT GTTCAAAGA GTTGTGATT ACTTTCATTT	60
CCACTTTC TCACCCCATTC TCCCTCAAT TAACTCTCT TCATCCCAT GATGCCATTA	120
TGTGGATTCC TCGAG	135

(2) INFORMATION FOR SEQ ID NO:166:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 449 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:166:

GAATTCGGCC AAAGAGGCCT AGAAAAAGTA GCACAGTGGA GTCTGAAATA GCAAGCGAAG	60
AGAAAAAGCAG AGCTGCTGAG AGGAAAAGGA TTATTATTAA GATGGAGCCA GAAGATATTC	120
CTACAGATGA ACTGAAAGAC TTTAACATTA TTAAAGTTAC TGATAAAGAC TGTAATGAAT	180
CCACTGACAA TGATGAATTA GAAGATGAAC CTGAAGAGCC ATTTTATAGA TACTATGTTG	240
AAGAAGATGT CAGCATAAAA AAAAGTGGTA GGAAAACTCT AAACCTCGA ATGTCAGTAA	300
GTGCTGATGA AAGAGGTGGT TTAGAGAATA TGAGGCCCC TAACAACAGC AGTCCAGTAC	360
AAGAGGATGC TGAAAATGCA TCTTGTGAGC TGTGTGGACT TACAATAACC GAGGAGGACC	420
TGTCATCTCA TTACTTAGCC AAACCTCGAG	449

(2) INFORMATION FOR SEQ ID NO:167:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 565 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:167:

GAATTCGGCC AAAGAGGCCT AAAAGGAAAC TTGGACAAGT AGAAAGTGGA TGACCCAGGC	60
TCCGTTACAT ATACTGGAT TCCAGCTGGG ACCTAGATT TCTGAGGACG GAAGCCAAGG	120
AGACAGGAAC ATGTGGCTGC TCCAGCTCT ACTCCTTCTC TGCCTCTCAG GCTGTTTGTC	180
TCTGAACGGC CCCGGCTCTG TGAAGTGCAC TGCGGGGGAC TCTCTGACAG TGTGGTGTCA	240
GTATGAGAGC ATGTACAAGG GATATAACAA GTACTGGTGC CGAGGACAGT ACGACACGTC	300
ATGTGAGAGC ATTGTGGAGA CCAAGGGAGA AGAGAAGGTG GAGAGGAATG GCCGCGTGTC	360
CATCAGAGAC CACCCGGAGG CTCTCGCCTT CACTGTGACC ATGCAGAACC TCAATGAAGA	420
TGATGCTGGA TCTTACTGGT GCAAATTCA GACAGTGTGG GTCCTGGATT CATGGTCACG	480
CGATCCCTCG GACCTGGTTA GGGTGTATGT TTCCCCAGCA ATTACAACCC CAAGGAGGAC	540
CACACATCCA GCCACCCCGC TCGAG	565

(2) INFORMATION FOR SEQ ID NO:168:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 158 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:168:

GAATTCGGCC AAAGAGGCCT AGTTTCCTTT ATATGTTTGC ACTTAATTTG ATTCCATCCT 60
 TCATGCTGTT TTCATTATTC TTAGTTCATC TACACCACAT AAATTATCAC CTTTGTTTTT 120
 AGTTCCCCAA TTTCCATGTG CCACAAACAA ATCTCGAG 158

(2) INFORMATION FOR SEQ ID NO:169:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 383 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:169:

GAATTCGGCC AAAGAGGCCT AGTCTCACCA TCTATTCTAA ACCTTATATT ATCAATCCTA 60
 TTCCCTCTCA CCAAAAGAAT CCCTTTATAC AAGTAATTAT CCTGTCTATG TCTTCAACT 120
 CTAGTTTCCC CACTGCAACT CTTCCTTAA TATATGTACC TGCTCTGTTA TCCCTCTCCA 180
 GCTACTTCCC TATTTTCTGT TCCCCTTAC AGGAAACTT TTCTCCAGCA TTCCCAATG 240
 CCATTGTCTT ACTTCCTCAC ATTCTATTTT CTCTCAAAC CATTTTATT AGGCTTCTTT 300
 CCCCAATGCG TATTGTCAAG CTTCACTTAA TGCCGTGCAA ATCACCTAT TCTCCAGGTC 360
 TTCTTTCTTC CCAGTCTCTC GAG 383

(2) INFORMATION FOR SEQ ID NO:170:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 282 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:170:

GAATTCGGCC AAAGAGGCCT AAATATTGTC TGAAAAAAT ATATGAGACC CATTACTCAG 60
 TCTCTCTCC TGCCATTAT ACTGCAGGTA TTCCCCAAGT TTCTCTCTC AACCTTTGCC 120
 TCCTTTTCCC TGCTTGCTCC CTTAGTTTTT TCCTCTGGGT GGATGACTCC CAAATCTAGC 180
 ACTGACCTGT TTGTCCACAT CCTTGAGTAT CCCACCACCA TTTCACACCC AGCATATCCA 240
 GATGGAGCTC TTATCAGTTG TAACAGCACT GCTCAATTG AG 282

(2) INFORMATION FOR SEQ ID NO:171:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 350 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:171:

GAATTCGGCC AAAGAGGCCT AGTGGAAGAG AAGAATGTTT CTGTCTCTTC CTACGTTGAC 60
 TGTCTTATT CCACTGGTTT CTTAGCAGG ACTGTTCTAC TCAGCCTCTG TGGAAGAAAA 120
 CTTCCACAG GGCTGCACTA GCACAGCCAG CCTTTGCTT TACAGCCTGC TCTGCCTAT 180
 TACCATACCA GTGTATGTAT TCTCCACCT TTGGACTTGG ATGGGTATTA AACTCTTCAG 240

GCATAATTGA TGCAACTAGA GTCAATATGC TGTATATATT AATGATAGCT CTTGGGCATC	300
GATCTCTGAA AGCTCAAATG GATGGAATTT AGTTTGCGGG AACTCTCGAG	350

(2) INFORMATION FOR SEQ ID NO:172:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 140 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:172:

GAATTCGGCC AAAGAGGCCT AGGGGTGTAC ATTTTATGG AAACCTTAAA TACTGTTTCAG	60
AAAGAATATA TCTTCAATCA AGGCTCTTGT GCAGCCTACA CAGAAAAATG AAGCTTTTTG	120
GGTTAGGTGC AACGCTCGAG	140

(2) INFORMATION FOR SEQ ID NO:173:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 304 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:173:

GTGGTCTCTC CTCCCTGCC ACTCCCTCT TCTTTTTTTT CCAACATGGC CTTGCTCCGC	60
GTACATCGCC ACCCAGGGAC CGCTGCCCGC CACCGTGGCT GACTTTTGGC AGATGGTGTG	120
GGAGAGCGGC TGCCTGGTGA TCGTCATGCT GACACCCCTC GCGGAGAACG GCGTCCGCA	180
GTGCTACCAC TACTGGCCCG ATGAAGGCTC CAATCTCTAC CACATCTATG AGGTGAACCT	240
GGTCTCCGAG CACATCTGGT GTGAGGACTT CCTGGTGAGG AGCTTCTATC TGAAGAACCT	300
CGAG	304

(2) INFORMATION FOR SEQ ID NO:174:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 188 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:174:

GCGATTGAAT TCTAGACCTG CCTCTCTTAT ACCTCGGTGT GGCCGAAAGG AAATAAGCAG	60
AGGCGCTATT GGCAGGACCT AGAACTTTC CTTGTAACAT AGCTAGTATG TTCCCTCTGC	120
CCCTTCTTCA TCTTTCCCTC ACACTTGCTG GAGCTGGAGC AGCTATCCTG ACCGAGGTG	180
CACCTCGAG	188

(2) INFORMATION FOR SEQ ID NO:175:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 274 base pairs

- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:175:

GAATTCGGCC	TTCATGGCCT	ACTATCTGCC	TTGCGCTCCC	ACTGCCCTGA	CCTGTGCCCT	60
CTCACAGGCC	CCCGTGATGG	CTCGCTGGCC	TCCCTTCGGC	CTCTGCCTCC	TCCTGCTGCT	120
GCTGTCCCCA	CCGCCACTGC	CCTTGACAGG	GGCCCCATCG	TTCTCCGCAC	CTAATACCAC	180
TCTCAACCAC	TTGGCACTGG	CACCTGGCCG	AGGCACACTC	TATGTCGGCG	CAGTGAACCG	240
CCTCTTCCAG	CTCAGCCCCG	AGCTGCAGCT	CGAG			274

(2) INFORMATION FOR SEQ ID NO:176:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 327 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:176:

GGTCAGCCGA	GCAATGATAGG	AGACATCATC	AACCTCGGCC	TGAAAGGGAG	GGAGGGGAGA	60
GCAAAGGTCC	TCAACGTGGA	GATCGTGGAG	GAGCCCGTGA	GTTATGTCAG	CGGGGAGAAG	120
CCGGAGGAGT	TTTCCGTCCC	ATTCAAAGTG	GAGGAGGTGC	AAGATGTGTC	GCCAGGCCCC	180
TGGGGGTTGG	TTAAGGAGGA	GGAAGGTTAT	GGAGAAAGCG	ATGTCACATT	CTCAGTTAAT	240
CAGCATCGAA	GGACCAAGCA	GCCTCAGGAG	AACACGACTC	ACGTGGAAGA	AGTGACAGAG	300
GCAGGTGATT	CAGTGGGCGA	GCTCGAG				327

(2) INFORMATION FOR SEQ ID NO:177:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 408 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:177:

GAATTCGGCC	AAAGAGGCCT	AAGCAATGTC	TCCACCACTG	CTGCTGCTAC	CCTTGCTGCT	60
GCTGCTGCCT	CTGCTGAATG	TGGAGCCTGC	TGGGGCCACA	CTGATCCGGA	TCCCTCTTCG	120
TCAAGTCCAC	CCTGGACGCA	GGACCCTGAA	CTACTGAGGG	GATGGGGAAA	ACCAGCAGAG	180
CTCCCCAAGT	TGGGGGCCCC	ATCCCCCTGG	GACAAGCCTG	CCTCGGTACC	TCTCTCCAAA	240
TTCTTGATG	CCCAGTATTT	TGGGGAAATT	GGGCTGGGAA	CGCCTCCACA	AAACTTCACT	300
GTTGCCTTTG	ACACTGGCTC	CTCCAATCTC	TGGGTCCCCT	CCAGGAGATG	CCACTTCTTC	360
AGTGTGCCCT	GCTGGTTCCA	CCACCGCTTC	AATCCCAATG	TCCTCGAG		408

(2) INFORMATION FOR SEQ ID NO:178:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 305 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double

(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:178:

GAATTCGGCC AAAGAGGCCT AGGAGGAATT TCCATCTTGC TCTCAAAGTG AGTCTGAATG	60
TGCTCGGTGG TGTCACCCCC GCCGAGCTGC CAGTGCAGAA GGCCACTATT GAACTCCTGC	120
ACACGCCCCA ACTTGTGAGA TCGGTCAACA ACAAACAGGT TGTTCTTTT GACTATCTTT	180
ATTGGCAGCT TGTCGAACTT ACTGGCTTGC TTGGGCTTCT CCTTTGGGTC TGCAGCGGCG	240
TCCGGGGCAG TCAGAGCGAT GCTGCTCTTT TCATCGCTTT CTGTCTTCTC GCTGTCTACC	300
TCGAG	305

(2) INFORMATION FOR SEQ ID NO:179:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 247 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:179:

GAATTCGGCC AAAGAGGCCT AGTGCAGCAA TTTAGAGAGT GTCTCAGGAG TGTGGCTCAC	60
TGGCAGCTGC AGCTATGTTA GTGCTTCTTT CTGCCTCAAG TTCAGAAACA AGCTGGACTA	120
TCTCAGGGTG ATTGAATTTT CCTGCTGTGG AATCATAGAA GTCTTGCACT CTCCCAGGTT	180
TGTGTTCAAG GTCTTCATAT TCAGATGCTT GAAGAATCAT TTCACATTGG TCTAGCATTC	240
AATCGAG	247

(2) INFORMATION FOR SEQ ID NO:180:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 315 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:180:

GAATTCGGCC AAAGAGGCCT AGTCAAGTTC ATTTCCCAGA GTCTTAAGAC TAAGTTCTGC	60
CTCCTCATTG CAGGTGTGCC GAGAGTTTTT TTTGAACAAC AAAAATTACT AAGGAACCTC	120
ACTACCTTTG GCGGTAGAAT TAGAAAACAG ATTCAGCAGT CACCTACTCC CCTTCAGTAA	180
TTGAGACAA TTATTTTCTT CCTGACACAA CATCAGGTCC CATGAAAAAT GACACCGTGC	240
CTGGTGTCTT TGGGTCTCTT AATGCTTCTT TTAGAGCCAC ATTTTCTTT TCAAACCGAG	300
TTCCCATCGC TCGAG	315

(2) INFORMATION FOR SEQ ID NO:181:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 328 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:181:

GAATTCGGCC AAAGAGGCCT AATTTTCTT CACGTTCTTT ATCACCACCA TGGTTATGTT	60
GGCTGCCCTG GCTCACCATT TGTTTTACTG GGATGTTTGG TTTATATATA ATGTGTGTTT	120
AGCTAAGGTA AAAGGCTACA GGTCTCTTTC CACATCCCAA ACTTTCTATG ATGCTTACAT	180
TTCTTATGAC ACCAAAGATG CCTCTGTTAC TGA CTGGGTG ATAAATGAGC TGCCTACCA	240
CCTTGAAGAG AGCCGAGACA AAAACGTTCT CTTTGTCTA GAGGAGAGGG ATTGGGACCC	300
GGGATTGGCC ATCATCGACA ACCTCGAG	328

(2) INFORMATION FOR SEQ ID NO:182:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 123 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:182:

GAATTCGGCC AAAGAGGCCT AGTTGTGGAA AAGAAAGACT GTGAGGGTAG GCACAAGAGC	60
ACTCAAATGT CCCAGGTAGA GAAAACAACA TGTATGATGG CCCAGAAGGA GGCAAGTCTC	120
GAG	123

(2) INFORMATION FOR SEQ ID NO:183:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 311 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:183:

GAATTCGGCC AAAGAGGCCT ACTTGGACAA GTAGAAAGTG GATGACCCAG GCTCCGTTAC	60
ATATACTTGG ATTCCAGCTG GGACCTAGAT TTGCTGAGGA CGGAAGCCAA GGACACAGGA	120
ACATGTGGCT GCTCCAGCT CTACTCCTTC TCTGCCTCTC AGGCTGTTTG TCTCTGAAGG	180
GCCCCGGCTC TGTGACTGGC ACTGCGGGGG ACTCTCTGAC AGTGTGGTGT CAGTATGAGA	240
GCATGTACAA GGGATATAAC AAGTACTGGT GCCGAGGACA GTACGACACC TCATGTGAGA	300
GCTCACTCGA G	311

(2) INFORMATION FOR SEQ ID NO:184:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 130 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:184:

GAATTCGGCC AAAGAGGCCT AGTTCAATCT GTAACAAGCC TTCTTCAATT TCCTCTCCAC	60
ATACCCTGCA TAGACTTTAA GATTCCTCTG CTCGATGCTA ATAAGAAGAC ACACACCCCT	120

CGTTCTCGAG

130

(2) INFORMATION FOR SEQ ID NO:185:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 416 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:185:

GAATTCGGCC	AAAGAGGCCT	AGGAGGGGGA	AGAGAGTCCG	TTTGCAGAA	GATGAAGAAA	60
AGAGTGAAAA	TTCCTCGAG	GACGGTGACA	TAACGGATAA	GAGTCTTTGT	GGAAGTGGTG	120
AAAAGTACAT	CCCACCTCAT	GTGAGGCAAG	CTGAGGAGAC	AGTGGACTTC	AAGAAAAAGG	180
AAGAACTAGA	AAGCTGAAG	AAACATGTAA	AAGGTCTACT	TAACAGGTTG	AGTGAACCCA	240
ACATGGCTTC	CATCAGTGGG	CAGCTGGAGG	AACTGTACAT	GGCCACAGC	AGAAAGGACA	300
TGAATGACAC	CCTGACCTCC	GCTCTCATGG	GTGCCTGCGT	CACTGCCTCG	GCCATGCCCA	360
GCAGACTGAT	GATGGAGCAT	GTTCTCTTAG	TCAGCATCCT	TCACCACTTA	CTCGAG	416

(2) INFORMATION FOR SEQ ID NO:186:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 344 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:186:

GAATTCGGCC	AAAGAGGCCT	ACTACATTTT	TACCTAAATT	TATAGAAAAT	CAATTCGGAT	60
TGACATCCAG	CTTCGAGCT	ACTCTTGGAG	GGGCTGTTTT	AATTCCTGGA	GCTGCTCTCG	120
GTCAAATTTT	AGGTGGCTTC	CTTGTTTCAA	AATTCAGAAT	GACATGTAAA	AACACAATGA	180
AGTTTGCACT	GTTACATCT	GGAGTTGCAC	TTACGCTGAG	TTTTGTATTT	ATGTATGCCA	240
AATGTGAAAA	TGAGCCATTT	GCTGGTGTAT	CTGAATCATA	TAATGGGACT	GGAGAATTGG	300
GAAACTTGAT	AGCCCCTTGT	AATGCCAATT	GTAACGTACT	CGAG		344

(2) INFORMATION FOR SEQ ID NO:187:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 488 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:187:

GAATTCGGCA	AGAGCCTAAA	ATCTACAAGC	ACCAGGAAGT	CAAGATGCAA	GCACCAGCCT	60
TCAGGGACAA	GAAACAGGGG	GTCTCAGCCA	AGAATCAAGG	TGCCCATGAC	CCAGACTATG	120
AGAATATCAC	CTTGGCCTTC	AAAAATCAGG	ACCATGCAA	GGGTGGTCAT	TCACGACCCA	180
CGAGCCAAGT	CCCAGCCCAG	TGCAGGCCGC	CCTCAGACTC	CACCCAGGTC	CCCTGCTGGT	240
TGTACAGAGC	CATCCTGAGC	CTGTACATCC	TCCTGGCCCT	GGCCTTTGTC	CTCTGCATCA	300
TCCTGTGTCAGC	CTTCATCATG	GTGAAGAATG	CTGAGATGTC	CAAGGAGCTG	CTGGGCTTTA	360

AAAGGGAGCT TTGGAATGTC TCAAACCTCCG TACAAGCATG CGAAGAGAGA CAGAAGAGAG	420
GCTGGGATTG CGTTCAGCAG AGCATCACCA TGGTCAGGAG CAAGATTGAT AGATTAGAGC	480
GACTCGAG	488

(2) INFORMATION FOR SEQ ID NO:188:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 163 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:188:

GAATTCGGCC AAAGAGGCCT AGGTCAGATG CATTAAAACA TATCAAAATG TTACAAAAAT	60
GTATGGCTCC CTTGCTGAGG CCCTGTCAGA TTATGTTAGA TGAGTAAACG CATCAGTGTG	120
TAAGTTCAGA ACCAAACGTT GAATCAAGTC ATGTACTCTC GAG	163

(2) INFORMATION FOR SEQ ID NO:189:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 310 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:189:

GAATTCGGCC AAAGAGGCCT ACCTGCTCAT ACCTGTGGCC AAAAGCATGA TGCCCCAGGC	60
TCTGCCCTCCA ATTCTACCAT CTTCTTCCAT CTTTCTCTTT TATCAGGTCT CTGCCCTCCT	120
GTACTTTGTA CTTAGATTCT CCTCTGCCAA GCCCATTGAG ACTGTGACTG GTAGGAGTGC	180
TGTGCTCAGC TTTCCACTTG AGTGTTTATC CAAGAAGTTG GATAACCCTC TCAAGTTATG	240
GCCTCCATTG CAGTGCGCCT CAGTCTATGG GGATGCATTC CACTCACCCT TGGGCCTAGG	300
GCAGGTCGAG	310

(2) INFORMATION FOR SEQ ID NO:190:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 516 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:190:

GAATTCGGCC TTCATGGCCT AGGGCCTCAG TCTTTTTACT TTTGCGGCTG TGTTTTCTCTG	60
AAGGCTTGGC ATTAGTAGAT TGAAAAGAAT AACCATCTAG GGAAATGTGA ATTCAGTTTC	120
TTTCTGACAT TCTGCTCTCT ACAAGGGGAT ATTATGTACA CATAAACCTA CTTCCAAAAT	180
AATGAAGTGA GGCCTAATTC CTTACTCTTC AGAGAGCCCA CTGTGGAAGT GTCAGTGACC	240
TTGTGTATGG GCTGCCCTTC ATGGCTCTGG GAGTCATTAT AAAGGGCAGC ATTTGGCGTG	300
GTGCGTCCTA AGCCAGTGTT TCTCGGCTCT GTTCCTTAAA CATGTGTTAG TGTTAATAGA	360
TGTTCTTGGA AAAAAAAAAA AAAAAACAGC ATTCTGAGGT CAAACATGCT CAGAAAGCTT	420
GGAATCTGCA CTACGCTTCT CGTACACATT TCATATTAAA GATTTTGGAA AGTCCTGCAA	480

TACAGAGCCC TGTCTAATAT TGCCACAGCC CTCGAG

516

(2) INFORMATION FOR SEQ ID NO:191:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 319 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:191:

GAATTCGGCC TTCATGGCCT ACTTGCTAGA TAGACAGATT AAGAATGTTG AAGACATGGT	60
CCAGTTTATT AATAACATTT TGGATGGCAC AGTAGAAGCC CAAGGAGGTG ATAGCATTTT	120
GCAGAGATTG AAAAGAATAG TATTTGATGC CAAATCTACT ATTGTGCTA TATTCAAGAG	180
CTCACCCTG ATGGGCTGCT TTCTCTTTGG CCTGCCACTG GGTGTCATCA GTATCATGTG	240
CTATGGAATC TACACAGCCG ACACAGATGG AGGTTATATA GAAGAACGAT ATGAAGTGTC	300
TAAAAGTGAA AATCTCGAG	319

(2) INFORMATION FOR SEQ ID NO:192:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 382 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:192:

GAATTCGGCC TTCATGGCCT AAGCAGAAGG ACATATTAGA GAAGGATTGT ATAGTTTTCT	60
GGTAAAAGAT GACAGTGAAT TGTATGGCGC ATGGATTAGC CGTGAAGGT GTTGAGTATA	120
AGTGGTCTCC AGCCAACTC TATGGTTACT GGAATAAGAG AGTAGGAACC TTCTCAGGCT	180
TTATCTTTAT CTATTCTTGT CAACAGTATG TACATGTGTC CCCAGCCCC AAATAACTGT	240
ACAGTTTAAT GATGTTCACT CTATACAGTT CCCAGAATCC ATTGGAAATT GCTGTAACAG	300
CATATCCTCA ATGCCCATCA ATTCTCCAG TCCAATTCT CCATGGCCTC CTCTGCCTCT	360
GCTGATCTGT GAACTTCTCG AG	382

(2) INFORMATION FOR SEQ ID NO:193:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 474 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:193:

GAATTCGGCC TTCATGGCCT AATATTTTAA AAGCGAAAGC TAACTTCTAA TTTTGAAAAT	60
TTTTATTGGG AGCAGGATAT TATAATAATA ATCTTTAGTT GTTAAACCAT TAAACATCAA	120
GGTTTTTTTAC ATTGTTTCTA TGCCTCCTCC CTCAAAAAAA AAAAACCTCC TACAATAAAA	180
CTGAAAAATT GCACAAAGAC ATATTAGTGG AAGACCACTG CTCGTTTAC ACAATGAAG	240
AGTATAAAGC AGAGAAGTGC TCCTTGGGCG AAAAGGCAAT TGGCAAAAAG CTAAGGAACA	300
TTTTCATAAT GAATTAGAAA TACAGATCAT CAGGAATATC CAGGAAGCGA TAGTGAATAC	360

CAGGCAGGCT TAAGAGACAG GAAACATTTA GCATGTTGGT AAACCACTTT AGCACATCAG
 CAAAAGCATA TAAACAGCTT TAGGATTGGA AATTATTGCC AGGGGGGACT CGAG

420
 474

(2) INFORMATION FOR SEQ ID NO:194:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 499 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:194:

GAATTCGGCC	TTCATGGCCT	ACGTNNCTAT	GTCTTCAAGC	ACAGAGGTGT	CCAGGTGTAT	60
TGCACATCTT	CATCGCACTG	AGCTGCATGG	ACAGCTGATT	TCTGTGGAAA	AAGTATAAGG	120
TGATCCCTCT	CAGAAAGAAA	TGAAGAAAGA	AAATGATGAA	AAGAGTAGTT	CAAGAAGTTC	180
TGGAGATAAA	AAAAATACGA	GTGATAGAAG	TAGCAAGACA	CAAGCCTCTG	TCAAAAAAGA	240
AGAGAAAAGA	TCGTCTGAGA	AATCTGAAAA	AAAAGAAAGC	AAGGATACTA	AGAAAATAGA	300
AGGTAAAGAT	GAGAAGAATG	ATAATGGAGC	AAGTGGCCAA	ACATCAGAAT	CGATTAAAAA	360
AAGTGAAGAA	AAGAAGCGAA	TAAGTTCCAA	GAGTCCAGGA	CATATGGTAA	TACTAGACCA	420
AACTAAAGGA	GATCATTGTA	GACCATCAAG	AAGAGGAAGA	TATGAGAAAA	TTCATGGAAG	480
AAGTAAGCAA	ATGCTCGAG					499

(2) INFORMATION FOR SEQ ID NO:195:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 337 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:195:

GAATTCGGCC	TTCATGGCCT	AAGCAAAAGA	GCATTAAGAA	GTGTCTGTTT	TTGTTATTGC	60
CATTTTCATA	ATATTTTAGT	AGGTGTTCAA	TTTCATTGGA	TATTCCTTTT	TTTTAATTGT	120
CTTTGTACCT	ATGATTGAAA	ACAGTAGTTG	GTCTATGACT	TTTGAGGAGA	GGGAGAACCG	180
AAGATTACAG	GAGGCCAGCA	TGAGGTTGGA	ACAAGAGAAT	GATGACCTTG	CCCATGAAGT	240
AGTAACAAGC	AAAATTGCTC	TACGGAATGA	CTTGATCAG	GCAGAAGACA	AGGCAGATGT	300
GTTGAATAAA	GAGCTCCTTT	TGACCAAAAC	CCTCGAG			337

(2) INFORMATION FOR SEQ ID NO:196:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 386 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:196:

GAATTCGGCT	TCATGGCCTA	AAGGAACTG	ACAAATTATC	CCCAGCTGCC	AGAAGAAGAA	60
ATCCTCACTG	GACGGCTTCC	TGTTTCCTGT	GGTTCATTAT	CTGATTGGCT	GCAGGGATGA	120
AAGTTTTTAA	GTTTCATAGGA	CTGATGATCC	TCCTCACCTC	TGCGTTTTCA	GCCGGTTCAG	180

GACAAAGTCC AATGACTGTG CTGTGCTCCA TAGACTGGTT CATGGTCACA GTGCACCCCT	240
TCATGCTAAA CAACGATGTG TGTGTACACT TTCATGAACT ACACTTGGGC CTGGGTTGCC	300
CCCCAAACCA TGTTTCAGCCA CACGCCTACC AGTTCACCTA CCGTGTTACT GAATGTGGCA	360
TCAGGGCCAA AGCTGTCATC CTCGAG	386

(2) INFORMATION FOR SEQ ID NO:197:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 429 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:197:

GAATTCGGCC TTCATGGCCT AGTTTTTGTC TTTTTTCTT TTTGGTATT ATTTGTTTG	60
CCACTTATTC CTAAAATTCA TATTGCTATT AACCGTACAC ATCTTCCAT GTTCTTATAA	120
TAATCTACAA ACATCTCTCC CTTTCTGTAG CTCTCTCTGT CACACACACA CACATGCACA	180
CACGCACACA CACACACACA CACACGCTGT GCACTCTCCT GAAGCATGTG TGTACATACA	240
TACATATGTG AGGGGTTTTA TGACTGTTTT ACCAAATTGT GTTCTTAATA TATACAATGT	300
TGGCTTCTTT TTAGCCATTC AGAAGTTATT TCAGTCATGG AATGATCTCT AGCCATATAA	360
CTGAAAACAG GTAAGTTTCT TTCTTGGGGA AGAAGGGCGA ATGGTGATAG AGAAAATGGA	420
GAGCTCGAG	429

(2) INFORMATION FOR SEQ ID NO:198:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 349 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:198:

GAATTCGGCC TTCATGGCCT ACCAAGCTAT GCAGGAACAG TTGTCTAAGA ACAAAGAACT	60
GACACAGAAA CTCCAGGTAG CCTCTGAGAG TGAGGAAGAG GAGGGAGGCA CAGAAGATGT	120
GGAAGAAGTC CTTGTCCCTG ATGTAGTGAA TGAAGTGCAG ATGAATGCAG ATGGGCCGAA	180
TCCCTGGATG CTCAGGAGCT GCACCAAGTGA CACCAAAGAG GCTGCAACCC AGGAGGACCC	240
TGAGCAACTG CCAGAGCTTG AGGCCCATGG AGTTTCTGAA AGTGAGGGAG AAGAAAGACC	300
AGTGGCAGAA GAAGAAATTT TGTGAGAGA ATTTGAAGAA AGGCTCGAG	349

(2) INFORMATION FOR SEQ ID NO:199:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 312 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:199:

GAATTCGGCC TTCATGGCCT AGGGAAAGCT CCAACTTGCT TTACCTTTCT AAGATATCCC	60
ATTTTCTCTA TACCATTGTG TGAATAATAT ATCTCTTGCC CACTGGTTTG TAACAGTGCC	120

TTAATTAGTT TTTGTGTTTG AAGTTCCAGA ATCTCTTCCT GGCCTATGTA TTGTGTTCCG	180
TTGATGGATC TTTCCATCCC ATGGTACCCT TTAATTATAT TGTCTTCATT TTTATTACTA	240
TTGTTATGCC CTTTTCTCTC TCCGTGCACA TCTTCATGTT TGAAGTCTAA AAACACACCG	300
CCAACGCTCG AG	312

(2) INFORMATION FOR SEQ ID NO:200:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 385 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:200:

GAATTCGGCC TTCATGGCCT AATATATCCA AGTAATAGCA TGTACAGTTT GGTAAGCAAT	60
ATAATAGAGA GATATTCACA GTGAAATAGG AAAGAGCAGT ATAGGTGCAA AGACAAAAAG	120
CATGACACAG CTAGATACAG GGCAGCTGTT ATTGGTTTTG TATGGAGAAA ACCTGGAGAA	180
ATGGTGAGAG AAGGGGCAGA AGATGAGAGG GGCCAGATCA TGGAGTACCT GTTTGTGCGG	240
CTCAGGAGTT TAGATGTTAT CATGCAGATA ACTAGGAGCC ATTTGAGGAA CTAAATACA	300
GGAGTGATAC CAGATTATA TGTTTTTAAA ATGATTACTT GGTGGTAATT AAAGAAAAGA	360
TTGGATGATT TAGGCAGATC TCGAG	385

(2) INFORMATION FOR SEQ ID NO:201:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 204 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:201:

AATTCGGCCT TCATGGCCTA CGTTTTTTTA AATTTTTTTA ACTACATATT TGATACGATC	60
TTTTCCTTCT TGCCTTCTTT TTGATTACTT ACTTTCTACC ATTCTATGTT TTTCGTCACT	120
AGTTTGAAAA TTGTATACTT TGTTTTTATT CTTTCAGTGG TTACCCTAGA AATTACAACA	180
AACAAAAATT GCAACAACCT CGAG	204

(2) INFORMATION FOR SEQ ID NO:202:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 450 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:202:

GAATTCGGCC TTCATGGCCT AAAATCATCA TGCATATTTA TTTCTCCAAA GCACCTTTGA	60
CAAGCATGAT TTGGATAGAG ACTGTGCTTT GTCACCTGAT GAGCTTAAAG ATTTATTTAA	120
AGTTTCCCT TACATACCTT GGGGGCCAGA TGTGAATAAC ACAGTTTGT CCAATGAAAG	180
AGGCTGGATA ACCTACCAGG GATTCCTTTC CCAGTGGACG CTCACGACTT ATTTAGATGT	240
ACAGCGGTGC CTGGAATATT TGGGCTATCT AGGCTATTCA ATATTGACTG AGCAAGAGTC	300

TCAAGCTTCA GCTGTTACAG TGACAAGAGA TAAAAAGATA GACCTGCAGA AAAAACAAAC	360
TCAAAGAAAT GTGTTACAGAT GTAATGTAAT TGGAGTGAAA AACTGTGGGA AAAGTGGAGT	420
TCTTCAGGCT CTTCTTGGAG AAGACTCGAG	450

(2) INFORMATION FOR SEQ ID NO:203:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 558 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:203:

GAATTCGGCC TTCATGGCCT AACTGGTTTC TGGCTCGTGG ANTCTGTTTC AAGATCATAT	60
AAGCCGTTGC CATTCCCAAG NAGCGCTGGG ATATGCTCCT TCTCAGATGC TGCTATTTCA	120
GTGAAGGTAT TTAATGCTTG TTCAACATTA GATTTCTGTT TGGTAGCCAT TAAGCAATAG	180
TTTTCCATTA TGCGAANCTG TACGTGACCC TGAACAGTCT GAGGTTTTAG TTCCTTAANA	240
AGTTTTTCTG CTGTTCTTAC TGCCAGTTGC ACAGATTCTT GCTTCTCAGT TGAATAACCC	300
AGGTCTCCAT CCAGGTTTTT AAATACTTCA CCTCCAACAG TTTCATTATC TGGATTCAAA	360
CAGATCTCTA TCATATTATA AAGGGCATT TGGCCCCAGT CACGATCTTT CCGAGCTTTA	420
TTAAAATGTC GAAGGGCATC ATTTGGTTCT CCAGTGTAAC AAAGATACAG TCCTTTACAA	480
TACTGAAATC CTGGTTCCAA TTTTGCTCTG GAGNNACGTT TCTCAGCCAT TGAGAAAAAT	540
CTTGGGACAT CCCTCGAG	558

(2) INFORMATION FOR SEQ ID NO:204:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 348 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:204:

GAATTCGGCC TTCATGGCCT ACAAGTAGGG ACTGACTTCT CTAGGTTTCT ACAAAGCTCT	60
TCAACCACAC TCATTTCAAG CTCTGTCAGA ACAGCATCTG AATTAGGAGG ACTTTGGGAT	120
TCTGGGATAC AGGAAGTATC CAGAGCTTTG GATATAAAAA ACCCTGGGAC AGATATTTTG	180
CAGCCTGAAG AGACCTATAT AGACCCTACT ATGATACAAT CTTTAACTTT TCCTTTGGCC	240
CTTCATAATC AAAGCTCCGA TAAGACAGCT AACATTGTGG AAAACCCATG TCCTGAGATT	300
CTAGGAGTGG ATGTAATATC TAAAGAGACA ACTAGGAGGA AGCTCGAG	348

(2) INFORMATION FOR SEQ ID NO:205:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 292 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:205:

GAATTCGGCC TTCATGGCCT AAGAAAAAAA AGAAAGAAAA AAAATGATAC TTTCCAGGTT	60
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CGCTTGGGTC CAGATCTGTA TTCCCAGGGC TCATAGAGAT ATTGGCAAAC TGACAGATTT	120
CATGGCTCAA GAAACCTAAA GACACCTACT TGAATTCCTT TGGTTGGCAG TCAAATGTTA	180
ACTAGTGTGT TTTCAAGCTT CTATTCTTAG GCATGTTACT TCCTTTTGGG AGTCAAAACC	240
AACCATCTTT TAAGTAAGAG GGCTAACCA ATATGTGCCA CACTAACTCG AG	292

(2) INFORMATION FOR SEQ ID NO:206:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 220 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:206:

GAATTGGGCC TTCATGGCCT AAAATATTAA AATCTTTGAA GAAGAAGAAG TTGAATTTAT	60
CAGTGTGCCT GTCCCAGAGT TTGCAGATAG TGATCCTGCC AACATTGTTT ATGACTTTAA	120
CAAGAACTT ACAGCCTATT TAGATCTTAA CCTGGATAAG TGCTATGTGA TCCCTCTGAA	180
CATTCCATT GTTATGCCAC CCATCTCGAG GCAGGTCTAG	220

(2) INFORMATION FOR SEQ ID NO:207:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 333 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:207:

GAAAAAATGG CCAAGGCTAC TGGGAAACTA AAGCCAACTT CTAAAGATCA GGTATTGGCC	60
ATGCTAGAGA AAGCCAAAGT TAACATGCCA GCCAAGCCTG CTCCACCCAC TAAAGCAACT	120
TCTAAACCAA TGGGAGGGTC CGCTCCAGCC AAATTCCAGC CTGCATCAGC ACCTGCTGAA	180
GATTGTATTT CCAGCAGTAC AGAACCCAAA CCTGATCCAA AAAAGGCCAA AGCTCCAGGA	240
TTATCCTCTA AAGCAAAGAG TGCACAAGGG AAGAAGATGC CAAGCAAAAC CAGCTTAAAG	300
GAGGATGAAG ACAAATCCGG GCCTATACTC GAG	333

(2) INFORMATION FOR SEQ ID NO:208:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 316 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:208:

GGAGACAAGT TCTCCTCAGT GAACTGGCAG TACCACTGTG GGCTTACCTG TGAGCACAAG	60
GCCGACCTTC TCCCTATCAG TGCATCCGTC CAGTTTATTA AAATTCCTGC ACAGTTACCC	120
CACCCCTGA CAAGATTCCA GATCAATTAT ACAGAGTATG ACTGCAACAG AAATGAGGTG	180
TGTTGGCCGC AGCTTCTATA TCCATGGACT CAGTATTATC AAGGGGAGCT GCATTCTCAG	240
TGTGTTGCTA AGGGCTTACT GTTGCTGTTG TTCCTCATAT TGGCCTTGTT CCTCAGCAAC	300
CCCCGGACCA CTCGAG	316

(2) INFORMATION FOR SEQ ID NO:209:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 517 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:209:

GAATTCGGCC	AAAGAGGCCT	ATGTCCCTGT	CCATCTTAGA	GGCTGACCAA	GCCCAGCCAT	60
GGGTGGTCCA	AATTGCTTAG	GTGGTCCCAA	TTGCTTGGCT	GGCCCAAGAG	ATGTCTGGTT	120
CTTAACAATA	CAAGAGCCTA	TAGAAATTGC	TAAAGGGATT	TCAGCCACAA	CTGAAGCTCA	180
CCAAGAATGA	GTTTCTGGA	ACTGGTTAAA	GTGTCACAGT	AGGGAGTAAG	GAAATAAGAA	240
TCCCCACCAA	ACATAAGAGA	ACAGAATGAT	AATAGTCCCT	ACTAGTCCAT	GACAAGGCTG	300
CCAATTAGGC	ATTAAAGCT	ATCAAAGATG	ATGCTGTGAG	GGACCTGGCA	ACTTTTGTA	360
TAGTCTGACT	TTAAATGTTT	TATTAATGGC	CAAGCAGCAA	ATATTTTAGG	ATTTGTAGGC	420
TATATGGTCT	CTGTCCCAAT	TACTCCATTC	TGCTACTGTA	GCATAAAAGC	AGCGATACAT	480
CCTAAACCCG	TCGATTGAAT	TCTAGACCTG	CCTCGAG			517

(2) INFORMATION FOR SEQ ID NO:210:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 829 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:210:

GAATTCGGCC	AAAGAGGCCT	AAGAACATGA	AACATCTGTG	GTTCTTCCTT	CTCCTGGTGG	60
CAGCTCCCCG	ATGGGTCCTG	TCCCAGGTGC	AGCTGCAGGA	GTCGGGCCCA	GGACTGGTGA	120
AGCCTTCGGA	GACCCTGTCC	CTCACCTGCA	CTGTCTCTGG	TGATTCCATC	AGTCATTACT	180
ACTGGACCTG	GATCCGGCAG	CCCCCAGGGC	AGGGACTGGA	GTGGATTGGA	TATTTCATT	240
CACCCGGGAA	CTCCAATAC	AATCCCTCCC	TCAAGAGTCG	AGTCACCATG	TCAGTCGACA	300
CGTCCACGAA	CCAGTTCTCC	CTAAAACTCA	NTTCTGTGAC	CACTGCGGAC	ACGGCCGTCT	360
ATTACTGTGC	GAGAGACCTA	TATTGCCGTG	GGGGAACCTG	CTACCCCGCG	AGACTTGACC	420
GCTGGGGCCA	GGGAACCCGG	GTCATCGTCT	CGTCAGCCTC	CACCAAGGGC	CCATCGGTCT	480
TCCCCCTGGC	ACCCTCCTCC	AAGAGCACCT	CTGGGGCACA	GCGGCCCTGG	GCTGCCTGGT	540
CAAGGACTAC	TTCCCCGAAC	CGGTGACGGT	GTCGTGGAAT	TCAGGCGCCC	TGACCAGCGG	600
CGTGACACAC	TTCCCGGCTG	TCCTACAGTC	CTCAGGACTC	TACTCCCTCA	GCAGCGTGGT	660
GACCGTGCCC	TCCAGCAGCT	TGGGCACCCA	GACCTACATC	TGCAACGTGA	ATCACAAGCC	720
CAGCAACACC	AAGGTGGACA	AGAAAGTTGA	GCCCAAATCT	TGTGACAAAA	CTCACACATG	780
CCCACCGTGC	CCAGCACCTG	AACTCCTGGG	GGGACCGTCA	GTCTTCCTC		829

(2) INFORMATION FOR SEQ ID NO:211:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 142 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:211:

GAATTCGGCC AAAGAGGCCT AGTTAATCTG ATAAATTCAC CATCAATTG GTAAGCTTTA	60
ATATAACTAC CCTGTTTTT GAATACAGAT AATGCAAAAG AAAACCATT TATACTCGGC	120
TATATACCTT CCACCACTCG AG	142

(2) INFORMATION FOR SEQ ID NO:212:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 555 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:212:

GAAATTCGGC CAAAGAGGCC TAGTGGAATC ATTCTGCCAC ACCATTTCTT ACTCAAATAG	60
GTACAAACAT ACCACAGACA CTCCCATATA CACATGCTCC TCTATCCGCC AACTCTGGAA	120
CCAAACTAA ATTGGTCTTC AAGAGAGATG ATGGCTTTAA GAACAAAAAT AGCCTTATCC	180
TCTATTTTAC TTGCTGTACT GTTGTACTGT TTATTTAAGA AACAAAGCTGG TGGTTGATGT	240
CCAGGAAAAA TTATCTTTTC AAAATGAGGG AAGAGGAGGT TCACCATGTG GATATGGTGT	300
GCCTTTCAAC ATCCTTAAGG ATTGTTGATA TCATTATTGT TAATCAATTG TTGTCAGCAC	360
AGTGGCTGCC CAAGCTGTGC AAATGAAACA GCCAATCAGC AGGAGAAAGT GATGAAATTA	420
AATGACCTCT TTCCTTAACC ACTCATCCGT AAGCCTTGTT ATTTTTCATA CAAACCTCGA	480
GCCGGGGGAG GAGGGGCGGC GCGAATGCT GGGAGAGTCA GGTCTAGAAT TCAATCGTAG	540
GCCTCTTTGG CCGAA	555

(2) INFORMATION FOR SEQ ID NO:213:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 97 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:213:

GAATTCGGCC AAAGAGGCCT ACGAGAAGGG CGGTGTGTAC AAAGGGCAGG GACTTAATCA	60
ACGCAAGCTT ATGACCCGCA CTTACTGGGA ATTCCTC	97

(2) INFORMATION FOR SEQ ID NO:214:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 487 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:214:

GAATTCGGCC AAAGAGGCCT AAGAAGAAAT TGGTAGATTG CGAGAAGAGA TAGAAGAATT	60
AAAACGTAAT CAGGAACCTT TACAAAGCCA GCTGACTGAA AAGGACTCTA TGATTGAAAA	120
TATGAAATCT TCCCAAACAT CTGGCACAAA TGAACAGTCT TCAGCAATAG TTTTCAGCTAG	180
AGATTCTGAA CAAGTTGCAG AATTAAAACA GGAAGTGGCA ACTTTAAAGT CTCAGTTAAA	240

CTCACAATCT GTGGAGATCA CCAAACACTACA GACAGAAAAG CAGGAACTGT TACAGAAAAC	300
AGAAGCGTTT GCAAAATCAG TTGAGGTACA AGGAGAGACC GAGACTATAA TAGCCACCAA	360
AACTACTGAT GTAGAAGGAA GACTGTCAGC ATTATTACAA GAGACCAAAG AGTTAAAGAA	420
TGAAATTAAA GCTCTGTCTG AGGAAAGAAC TGCCATTAAA GAGCAGCTGG ATTCATCTAA	480
TAGTACC	487

(2) INFORMATION FOR SEQ ID NO:215:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 584 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:215:

GAATTCGGCC AAAGAGGCCT ACTGGGCCCTT TCAGCACCTG CTCCAGCTTC ACCTTGGTGA	60
ACATCAGGTT GAAGTTCTCA GGGTGCTCGG TGATGGCCAT GTTGACAACA TCCAGGGCAT	120
GCTGGTGGTG CTTCTGGGCA GAGAAGAGCA GTGCCAGCAG GTGGAGGGCG TGGGCATCAT	180
CCTTGCGTAC CTTCAGGGCC TCCTGCAGCT GCTCCATGGC ACTGGAGATC TGTCGGACGA	240
GGGCCAGCTG CAGCGAGACA TAGAGGATGA CCTGGGGGTC ACTGGGCGCC AGCTGCTGAG	300
CCCTCTCCAG CGTCTGCAGT GCCTTCCGGT GCAATTCATC TTGCTTGGAC TTCAGGGTGG	360
CGTCGGTGGC CTGCAGGCTA TAGGTGAGAC CCAGAGCCAG GTAGCCCTTG GGGAGGAACT	420
CCCCGGCTTC CTCTCCGAGG CTGATCACCA TCATGGCAAA GTGCTCTGCT TCCTCTAGCC	480
AGCGAAGGGA CCCGATGCAG ACCTTCGCGG CCATCAGGGG CACGGTGGGG TCCGAGGGCC	540
GCAACTTCAC ACACTCCCGC AGCAGGGACA CAGCGTAGGC TGAC	584

(2) INFORMATION FOR SEQ ID NO:216:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 532 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:216:

GAATTCGGCC AAAGAGGCCT AGACCTGCCC TAAAGATAGA GTCTTGATGC ACCGTCTACC	60
TTGTCCCCAA CCAAGAGTGA GTAGTGACA GAAGTCTCCT GGCACCCTGG GAATCCTGCA	120
TTTTTAATGG ACGAGCAGGG CAGGAAAGAA AAAAAAACC CAAACCCCAT CACTCTGCCA	180
GCCCCTGTGA CCAAAGCAGC CCAAATCAGT TACCTTGACA ACTCTCATGC ACAGACTGCA	240
CCAGCCTGTG TTGCAAACAT CACTGCCCCG CTTCTAACAG GAAGAGATAC TCTTTTGGGG	300
GTCTTGCAAG GCCCAGGACC AGAGCCCTT CTACCCAGGG CCCTTCCAAA GGCAAAGCAC	360
AGAGTCACAT TTGGGCGTGG CATGAGAGGG AAATAAGAG ATTTGGCTGT AGTGGGAGGG	420
AGGTTTCAGT GCTTTTCTG GGGACATTGG TGCCTATCTC TATTCTGAGA GTTGTCTCTC	480
TCATAGGACA CCATAAATCG CATCCAGGAC CTGCTGGCTG AGGGTACTCG AG	532

(2) INFORMATION FOR SEQ ID NO:217:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 269 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:217:

GAATTCGGCC	AAAGAGGCCT	AGTGTGTCCG	GGTCTTATAC	AAAAACAACA	CAGTGAATGA	60
AGGAATAAAT	ATTTATTGAA	TGGAAAATCA	GCAAAGGAAA	AAATTGTATA	ATTGTCAATG	120
ACAATGGGAA	GCACATAGTG	AGGCTATGAG	TGATTTGGAA	ATCATGAGCG	TGCAGTGTTC	180
TGTTACGCA	TTTCGGTTGT	GTTTTTCAGAA	AGTAACTACA	ACATAGCATC	ATGTAGCAGA	240
ATTGCTGGTT	GTAAGCAAAA	AGGCTCGAG				269

(2) INFORMATION FOR SEQ ID NO:218:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 675 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:218:

GAATTCGGCC	AAAGAGGCCT	AATTCTTTTT	CTTTTAAATT	TGAAGAAAAA	TCATCAGTCT	60
TGGAATACAG	AAGAGAAACT	AGAAATATAC	GTATTTTGTT	TCACATTGGA	ACAGTCATTC	120
TTGAGGAATA	CTCCATACCT	GAGTAGACAG	CCATGTGGCC	ATCGCAGCTA	CTAATTTTCA	180
TGATGCTCTT	AGCTCCAATA	ATTCATGCTT	TCAGCCGTGC	CCCAATTCCA	ATGGCTGTGG	240
TCCGCAGAGA	GCTATCCTGT	GAGAGCTATC	CTATAGAGCT	TCGCTGTCCA	GGAACAGACG	300
TCATCATGAT	AGAAAGTGCC	AACTATGGCA	GGACTGATGA	CAAAATTTGT	GACTCTGACC	360
CTGCTCAGAT	GGAGAATATC	CGATGTTATC	TGCCAGATGC	CTATAAGATT	ATGTCTCAAA	420
GATGCAATAA	CAGAACCCAG	TGTGCAGTGG	TGGCAGGTCC	TGATGTTTTT	CCAGACCCGT	480
GTCCAGGAAC	CTATAAATAC	CTTGAAGTGC	AGTATGAATG	TGTCCCTTAC	ATTTTTCTTT	540
GTCCTGGACT	ACTAAAAGGA	GTATACCAGA	GTGAACATTT	GTTTGAGTCC	GACCACCAAT	600
CTGGGGCGTG	GTGCAAAGAC	CCTCTGCAGG	CATCTGACAA	GATTTATTAT	ATGCCCTGGA	660
CTCCCTACAG	AACTG					675

(2) INFORMATION FOR SEQ ID NO:219:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 414 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:219:

GAATTCGGCC	AAAGAGGCCT	ACTCCCTGTT	TTGAACAAGT	TTTTTTGAGA	ATTCTTAGTT	60
TTAGTTTTTG	TTTAGCTTAC	ACACTGAAAA	TTTTGAGAAG	CATCTAAAAA	AATCCACAAT	120
TAGTGCAAAA	AGAGGGGACA	ATACTTTAAG	TCATTCCTTC	TATAAAAAGA	ATTAAGGTTA	180
CTAAATGCCA	ATTTTTAAGC	AAATATATAG	TTTCCTATTT	GCCTTCTGAA	AGACAGCAGA	240
TATAAAAATA	GTTCAATATT	AGGTTTAACA	AGGTTTGAAC	AACACATGTA	CTATCAGCTT	300
TATTTTACCT	GCAAAAATAT	TTTAGCTACA	CTTGGAAAAA	AATAAACTTG	AGAATATAAC	360
TTCACATTTT	TAAGGCCAGA	TGCAAGAATA	CTTATTTAGG	CCTCTTTGGC	CGAA	414

(2) INFORMATION FOR SEQ ID NO:220:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 120 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double

(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:220:

GACCGTCGAT TGAATTCTAG ACCTGCCTCG AGATTGGAGA CAGAAGGTCC CGGGAGCAGA	60
AAGCCAAACA GGAGCGGGAG AAAGAAGTGG CAAAAGTCAC TATCAAGAAG GAAACTCGAG	120

(2) INFORMATION FOR SEQ ID NO:221:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 333 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:221:

GAATTCGGCC AAAGAGGCCT AAGCAGCAGC TGCTTATATG CATGTGAACA GCTGGGGAAT	60
TAATTTGGTA TGCATTCTCA GGAGCCACTC ATCTGCTGGC AGAGGTAGCA GAAGAATGCC	120
CTTAGTGTA GTCCTCTACA ACCATACACC AAATGTGCTC CCTGCATTTC AAATCCATT	180
GTAGAAAGTC TCTGATAATC TCACTTATAC CATGAGCCAT TCCTCAGTAT CTGCTCTCT	240
CCTGTTAGTG TTCTACAATT CCTTTCTCCT TAATTTTTCT CCGCTTTACA AAATGTCACA	300
CAGACAAGTG CATAATACTT AAACAAGCTC GAG	333

(2) INFORMATION FOR SEQ ID NO:222:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 817 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:222:

GAATTCGGCC AAAGAGGCCT AAGAAAAGCA CCCTTATTAA GAATTGCAGC AAGTAAGCCA	60
ACAAGGTCTT TTCAGGATGA TTTTCTTATA TCAAGTGGTA CATTTCAATT TATTTACTTC	120
AGTTTCTGGT GAATGTGTGA CTCAGTTGTT GAAGGACACC TGCTTTGAAG GAGGGGACAT	180
TACTACGGTC TTCACACCAA GCGCCAAGTA CTGCCAGGTA GTCTGCACTT ACCACCCAAG	240
ATGTTTACTC TTCACCTTCA CGGCGGAATC ACCATCTGAG GATCCCACCC GATGGTTTAC	300
TTGTGTCCTG AAAGACAGTG TTACAGAAAC ACTGCCAAGA GTGAATAGGA CAGCAGCGAT	360
TTCTGGGTAT TCTTTCAAGC AATGCTCACA CCAAATAAGC GCTTGCAACA AAGACATTTA	420
TGTGGACCTA GACATGAAGG GCATAAATA TAACAGCTCA GTTGCCAAGA GTGCTCAAGA	480
ATGCCAAGAA AGATGCACGG ATGACGTCCA CTGCCACTTT TTCACGTACG CCACAAGGCA	540
GTTTCCAGC CTGGAGCATC GAAATCTTTG TCTCCTTAAA ACATCTGAGA GTGGATTGCC	600
CAGTACACGC ATTAATAAAGA GCAAAGCTCT TTCTGGTTTC AGTCTACAAA GCTGCAGGCA	660
CAGCATCCCA GTGTTCTGCC ATTCTTCATT TTACCATGAC ACTGATTTCT TGGGAGAAGA	720
ACTGGATATT GTTGCTGCAA AAAGTCACGA GGCTGCCAG AAAGTGTGCA CCAATGCCGT	780
CCGCTGCCAG TTTTTTACCT ATACCCCAAC GCTCGAG	817

(2) INFORMATION FOR SEQ ID NO:223:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 587 base pairs

- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:223:

GAATTCGGCC	AAAGAGGCCT	AGGAGATACA	TCATCATATC	ACGGAAAGAG	ATGCAGATAG	60
ATCTTTGACC	ATACTTGATG	AACAGTTATA	CTCATTTGCG	TTTTCCACCG	TGCACATTAC	120
GAAGAAAAGA	AATGGAGGTG	GGAGTTTAAA	TAACATTTC	TCCTCCATT	CATTGACTCC	180
CAGCACCAGC	CAGGAGGACC	TTTATTTTCAG	TGTTCTCTCC	ACTGCCAACA	CACCCACGCC	240
CGTTTGCAAG	CAGTCCATGG	GCTGGTCCAA	CCTGTTTACA	TCTGAGAAA	GGAGTGACCC	300
AGACAAAGGG	AGGAAAGCCC	TGGAGAGTCA	CGCTGACACC	ATCGGGAGCG	GCAGAGCCAT	360
CCCCATTAAA	CAGGGCATGC	TCTTAAAGCG	AAGTGGGAAA	TGGCTGAAGA	CGTGGAAAAA	420
GAAATATGTC	ACCCTGTGTT	CCAATGGCGT	GCTCACCTAT	TATTCAGCT	TAGGTGATTA	480
TATGAAGAAT	ATTCATAAAA	AAGAGATTGA	CCTTCGGACA	TCTACCATCA	AAGTCCCAGG	540
AAAGTGGCCA	TCCCTAGCCA	CATCGGCCTG	CGCACCCATC	TCTCGAG		587

(2) INFORMATION FOR SEQ ID NO:224:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 534 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:224:

GAATTCGGCC	AAAGAGCCTA	AGTAGTTGCT	GCCTTTCTTC	AGATCAGGTT	ACCACAATGC	60
CTCCCCGCTG	CTGACGCTTC	ATCCCCCACA	CCTCCAGCCC	CAGTTACCTG	GAGCTTCTCA	120
GAACCCACTT	TGCCGGTGCT	AAAACACAAG	AGGGGGTGAA	AGTGGCTGCC	AGTAATGGCC	180
AGAAACCAAC	CACCAGAGGC	CAGGCTGAAA	GACAAGCTCC	GGGTGTCCAG	GGGCTGACGG	240
GCCCAACCATG	TGGCAGGTCC	CAGGCCCCAC	CCACTGCGCC	ATCCGTCTCT	GAGCTCCACA	300
GTGGTCCAC	TAATGGGAAC	CTCCTCTAGG	GAGAGTGATA	CTGCACCTTC	ACCCGTAGGA	360
CTCATATTTA	TAACAATGTG	TAATGGCTGT	AGCAAAAAGC	CCTTGTTTCT	AGATGTAAAT	420
GGTCAAAGAA	ACAAGCGCTC	TATTGTTTTG	AATAAAATAG	TTCAAATGAG	TCCTGTATCA	480
TTGTATCTCC	TATTCTGGAT	TAGTGCCTTT	TGGACAGTAG	ACTGTAACCT	CGAG	534

(2) INFORMATION FOR SEQ ID NO:225:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 118 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:225:

GCTCCACTCT	CTCCCTATCC	ATTTGTAAGA	ACAGGCTCCC	CTCGCCGAAT	ACAGTTGTCT	60
CAAAATCATC	CTGTCTACAT	TTCCCCACAT	AAAAATGAAA	CAATGCTTTC	TCCTCGAG	118

(2) INFORMATION FOR SEQ ID NO:226:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 582 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:226:

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GAATTCGGCC AAAGAGGCCT AAATTTTAGT AGAGATGGAA TTTCACCATA TTGGCCAGGC      60
CGGTCTCAAA CTCTTGACCT CAAGTGATCT GCCCGCCTCG GCCTCCCAAA ATGTTGAGAT      120
TACAGGCGTG AGCCACCATG CCTCTTTAC ATTCTTTTCT TCTGTTCACT ACAGCCGTGG      180
AGAGCTCCGG GTTGTCTGTC ACATGTGCAC TGCCCTCTCT TTTATGGACC TTTAGGCTG      240
GCTGCACCCT CCGTCTGTGT CACCCTCCTG CTCCTCCTCC ACCTGGCTAG TTCCTGTTGG      300
CCACTTTTGG AAATTCATGC CAGTCCAGTC CACCCTGAGT ACATCCTCTT TCTGTGTCAC      360
TGAGCTCACT ATGCTGGGTT TTATCTATGT CTCCTCGCA ACTAGATCAT TCACGTCTTG      420
AAGTTAGGCA TCATGCGTTC TTCATTTCTG TACCTCCCAA CTCAATGCTT AGCACCCAGC      480
AGGGGCTCAA GACTGTGTGT GGAATGAAGG ATTCGTGTGA AAATGCAGGG AGATGGAAGG      540
CTGAGCGTTT CTGTTCTTG ACCATTCCCG GGTGGCTCG AG                          582

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(2) INFORMATION FOR SEQ ID NO:227:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 461 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:227:

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GAATTCGGCC AAAGAGGCCT AAAAATTAT AAATAAGTGA GACTACTGCC CCCTAGCCTA      60
AAATTCATTC CCTGCGCTCA CTCAACATCA TAGTTCCTTA GGAAGACAAG TTGTTCTATA      120
GCATAAAGAT ACAACCTATT TAGATAGTCT AAAGATTCTC CTCTGTTTCT CAAATACAGT      180
CAGTTATGCA GCTCAAAATG CCTCTCATTT TCCTGCTTTT TTTTCTTCTA CTATTGTTGC      240
CTCCAGGCTT TGCAGAAACA CATGTTATTC TCCCCTAAA ATCTGTTTCT CTCTAGTTT      300
TCTCTCTGCC AGCAATGGCA CCACACAGTC TTTTGGTTT GCACCAGAGA ATTAGAGATG      360
AACCCCTCAT CTCTAATCTA TCACAAGTTT CCTCAGATTT AAACCTCTCA ATCAAGATGT      420
TTCTCACCAT TTCCATTACT ATTGTCCCA GCTTTCTCGA G                          461

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(2) INFORMATION FOR SEQ ID NO:228:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 133 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:228:

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GCCTAAACCG TCGATTGAAT TCTAGACCTA TCTCGAGAAA GAGTTGTTCT GGAAAGAAAT      60
GAAGAAAAGA GCAGAACCAA TCTCAAGCAG CCAAGTGGTG AAGTTGGATG TATGTGACCC      120
TACGTCTCTC GAG                          133

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(2) INFORMATION FOR SEQ ID NO:229:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 482 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:229:

GAAAGGGATC	AAAAAGAAAA	AGTGATCGAA	TGGAATCTAC	TGATACCAAA	CGACAAAAGC	60
CTTCTGTCCA	TTCAAGACAA	CTGGTTTCTA	AGCCACTGAG	CTCATCTGTT	AGCAATAACA	120
AAAGAATAGT	TAGTACAAAA	GGAAAGTCAG	CCACAGAGTA	TAAAAATGAG	GAATATCAAA	180
GATCTGAAAG	AAACAAGCGT	CTAGATGCTG	ATCGGAAAAAT	TCGTCTATCA	AGTAGTGCCT	240
CCAGAGAACC	TTATAAGAAAT	CAACCTGAAA	AAACCTGTGT	CCGGAAAAGG	GATCCTGAAA	300
GGAGGGCCAA	ATCTCCTACG	CCAGATGGTT	CTGAGAGAAT	TGGGCTTGAA	GTGGATAGAC	360
GTGCAAGCAG	ATCCAGCCAG	TCTTCTAAGG	AAGAAGTGAA	CTCTGAAGAA	TATGGCTCTG	420
ACCATGAGAC	TGGCAGCAGT	GGTTCTTCTG	ATGAGCAAGG	GAACAACACT	GAAAATCTCG	480
AG						482

(2) INFORMATION FOR SEQ ID NO:230:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 501 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:230:

GAATTCGGCC	TTCATGGCCT	AGGGGATAAA	TGTAAGCTTG	TTAAAGTAAG	CACCACACCA	60
TGTTTCTGTC	TCCCCAGCAC	CCAGCACAGT	GCTGTGAACC	TTGGCAGATG	CTAGATAAAT	120
GTGTGTTGAA	TGAATGTGCC	TATGAAGCCA	CAAAGATGCC	ACATGTTAGT	ATATCAGTGA	180
GAGGTGACTC	CACAGTGCTC	TCTGGAGAAG	CAATATGAGT	GACTGAAGAG	TGGGGCCTTT	240
TGCTTTTGCC	TGGATATAGG	GGTGCTCTTC	TACTGTAATT	GGGTGTGGAA	AAACTCTGGC	300
TTTATGGTAT	TCCATTAGGT	TCTTTTCATT	TAAAGTAGTC	TTAAAATCAA	AGTATCCAAT	360
ATTTTAAAGC	CACAAAGTAG	ATTACATAAT	TAGCAGAGAT	TTTAGTCAGT	AAAATGTTAG	420
AAATCAAAC	ATAAGAAAAT	TCAAGTCCTT	TATTTTGTGT	CTTGGGTATA	TGTCATTATT	480
TTAAATTCCA	CAGCTCTCGA	G				501

(2) INFORMATION FOR SEQ ID NO:231:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 326 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:231:

GAATTCGGCT	TCGATTGAAT	TCTAGGACTT	GACAGAATTC	GAGTTATCCT	TCTCAGAACA	60
TGTGCAGAGT	CTCTTTTTC	CTCACCATGT	GGTCCTGTGC	TCTTTCAGGT	GGGAGTTTTC	120
GGGCCTCCAG	GGCAGCAGGC	ACCACCTCCA	TATCCCGGCC	CACATCCAGC	TGGACCCCTT	180
GTCATACAGC	AGCCAACAAC	ACCCATGTTT	GTAGCTCCCC	CCCAAAGACC	CAGCGGCTTC	240
TTCACTCAGA	GGCCTACCTG	AAATACATTG	AAGGACTCAG	TGCGGAGTCC	AACAGCATTG	300

GCAAGTGGGA TCAGAGCAAT CTCGAG

326

(2) INFORMATION FOR SEQ ID NO:232:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 367 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:232:

GAATTCGGCC	TTCATGGCCT	AATCAGAAGC	TTTTCAAAAT	TCCGTCTTCA	AGAAGAAACA	60
CCCGTGGAGG	AAGAAGACAT	TATACAAAAC	AAATTTAGAA	ACTGGGATCA	TGAGTGGAAA	120
AACAAAGGCA	AGAAGGGCTG	CCATGTTTTT	TAGACGTTGC	TCTGAAGACG	CCAGCGGTAG	180
CGCCAGTGGC	AATGCTTTGT	TATCAGAGGA	CGAAAATCCT	GATGCGAATG	GGGTAACCTG	240
ATCATGGAAG	ATTATTCTAA	GTACAATGCT	TACACTGACT	TTTCTTCTTG	TAGGACTCCT	300
AAATCATCAG	TGGCTTAAAG	AAACAGATGT	TCCTCAGAAA	TCCAGACAAT	TATATGCCAT	360
GCTCGAG						367

(2) INFORMATION FOR SEQ ID NO:233:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 320 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:233:

GAATTCGGCC	TTCATGGCCT	AAAGAAGAAT	TGACACCTCT	TGGAGTCCAC	TTGGCACGAT	60
TACCCGTTGA	GCCACATATT	GGAAAAATGA	TTCTTTTTTG	AGCACTGTTT	TGCTGCTTAG	120
ACCCAGTACT	CACTATTGCT	GCTAGTCTCA	GTTTCAAAGA	TCCATTGTGC	ATTCCACTGG	180
GAAAAGAAAA	GATTGCAGAT	GCAAGAAGAA	AGGAATTGGC	AAAGGATACT	AGAAGTGATC	240
ACTTAACAGT	TGTGAATGCG	TTTGAGGGCT	GGGAAGAGGC	TAGGCGACGT	GGTTTCAGAT	300
ACGAAAAGGA	CACACTCGAG					320

(2) INFORMATION FOR SEQ ID NO:234:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 358 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:234:

GAATTCGGCT	TCATGGCCTA	CGATGAGGCT	GCTGTCATTT	GTGGTGTGG	CTCTATTTCG	60
TGTCACCTCA	GCAGAGGAAG	GAGCCAGGCT	TTTGGCTTCC	AAATCACTGC	TGAACAGATA	120
CGCCGTGGAG	GGACGAGACC	TGACCTTGCA	GTACAACATC	TACAATGTTG	GCTCAAGTGC	180
TGCATTAGAC	GTGGAACAT	CTGATGATTC	CTTCCCTCCA	GAAGACTTTG	GCATTGTGTC	240
TGGAATGCTC	AATGTCAAAT	GGGACCGGAT	TGCCCTGCT	AGCAATGTCT	CCCACACTGT	300
GGTCCTGCGC	CCTCTCAAGG	CTGGTTATTT	CAACTTCACC	TCGGCAACAA	TCCTCGAG	358

(2) INFORMATION FOR SEQ ID NO:235:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 513 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:235:

GAATTCGGCT	TCATGGCCTA	GTTGTACGTA	ATGTATTTAT	ATGTTAATTT	GTTATGTATA	60
TAGATGTGCA	AGTCTTGTC	GAATTGGCCT	CAGTGTAGTT	AAAGGGCAGA	AGGGGAAGAT	120
ACTGACTAGT	CATAGAAATA	CCTCATTCGC	CTGTGGGAAG	AGAAGGGAAG	CCTCTTCAGG	180
GTGAGTGAAT	GGCAAAGCGG	TTGCTTCTGG	CTCCTCCTTC	CCCTGTGGTC	TTGGAAGTGT	240
GTGGAAGGCA	GGGACAGAGA	TGGAGGCCGA	GCCAATAGAC	TGAAGAGACC	ACAGCAATTG	300
GCTCCTCCAT	CTAGAGATTT	TCTTGGCAGT	ATTCCATGGG	ATGTTAAGCA	AAGGAAACCA	360
AAGGAATCGT	TTCAAATGGA	CTCATGGCTT	AGAAATCTTT	ATTCTTAGGG	CAGTCAGTAG	420
TATTCTAAAG	CTTTCTGACA	AGATAAAGGA	AGTCACCAAA	ATTTCTTTTT	TTAAATTGTA	480
TCTAATCCTC	AACAACAAAC	CAAACTCTC	GAG			513

(2) INFORMATION FOR SEQ ID NO:236:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 412 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:236:

GAATTCGGCC	TTCATGGCCT	ACTTGGAAT	GTTTGATGCT	ACTCTGAAAG	ATCGAGAACT	60
GAGCTTTCAG	TCGGCTCCAG	GTAATACCAT	GTTTCTGCAT	TGGCTAGTGG	GAATGGTATA	120
TGTCTTCTAC	TTTGCTCCT	TCATTCTACT	ACTGAGAGAG	GTAATTCGAC	CTGGTGTCTC	180
GTGGTTTCTA	AGGAATTGGA	ATGATCCAGA	TTTCAATCCA	GTACAGGAAA	TGATCCATTT	240
GCCAATATAT	AGGCATCTCC	GAAGATTTAT	TTTGTCAAGT	ATTGTCTTTG	GCTCCATTGT	300
CCTCCTGATG	CTTTGGCTTC	CTATACGTAT	AATTAAGAGT	GTGCTGCCTA	ATTTTCTTCC	360
ATACAATGTC	ATGCTCTACA	GTGATGCTCC	AGTGAGTGAA	CTGTCCCTCG	AG	412

(2) INFORMATION FOR SEQ ID NO:237:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 337 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:237:

TTCATGGCCT	AGAGATATGC	TTCTTTGTAC	CAATATGGAA	AATCTAAAAG	AAAAAACCCA	60
CACTCAGCAC	TATGAATGTT	ATAGGTACCA	AAAAGTGCAG	AAAATGGGCT	TTACAGATGT	120
GGGTCCAAAC	AACCAGCCAG	TTAGTTTTC	AGAAATCTTT	GAAGCCAAAA	GACAAGAGTT	180
CTATGATCAA	TGTCAGAGGG	AAGAAGAAGA	GTTGAAACAG	AGATTTATGC	AGCGAGTCAA	240
GGAGAAAGAA	GCAACATTTA	AAGAAGCTGA	AAAAGAGCTG	CAGGACAAGT	TCGAGCATCT	300

TAAATGATT CAACAGGAGG AGATAAGGAA GCTCGAG

337

(2) INFORMATION FOR SEQ ID NO:238:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 750 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:238:

GAATTCGCGC	ATTCGGTACA	ACAAGAGAGA	TAAACGATGA	AACCGTTACA	TTATACAGCT	60
TCAGCACTGG	CGCTCGGACT	GCGTTAATG	GGGAATGCAC	AGGCAGTGAC	GACCATTCCG	120
TTCTGGCATT	CTATGGAAGG	GGAAGTGGT	AAAGAGGTGG	ATTCTCTGGC	CCAACGTTTT	180
AACGCCGAAA	ACCCGGATTA	CAAAATTGTA	CCGACCTATA	AAGGCAACTA	CGAACAGAAT	240
TTAAGCGCGG	GGATTGCCGC	ATTTCGTACC	GGCAACGCGC	CGGCTATTTT	GCAGGTTTAT	300
GAAGTTGGCA	CCGCCACCAT	GATGGCGTCG	AAAGCCATTA	AACCGGTGTA	TGACGTGTTT	360
AAAGAGGCAG	GGATTCAGTT	CGATGAGTCG	CAGTTTGTC	CGACGGTTTC	AGGTTACTAC	420
TCCGACAGCA	AAACGGGCCA	CTTACTCTCC	CAGCCATTCA	ACAGCTCGAC	CCCCGTTCTC	480
TATTACAACA	AAGACGCCTT	CAAGAAAGCA	GGATTAGACC	CGGAACAGCC	GCCGAAACC	540
TGGCAGGATC	TGGCGGACTA	TGCCGCGAAA	CTGAAAGCCT	CCGGCATGAA	GTGCGGCTAC	600
GCCAGCGGCT	GGCAGGGCTG	GATCCAACCTG	GAAAACTTTA	GCGCCTGGAA	CGGTCTGCCG	660
TTTGCCAGCA	AAAACAACGG	CTTTGACGGC	ACGGACGCGG	TGCTGGAGTT	CAATAAGCCG	720
GAGCAGGTGA	AACACATCGC	CATGCTCGAG				750

(2) INFORMATION FOR SEQ ID NO:239:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 490 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:239:

GAATTCGGCC	TTCATGGCCT	ACTTACAGAA	CCTATTCACT	GGGAAGGAAG	CCCTCATTAT	60
AATGATTTTC	ATTCTTATGT	GTGTTTCAGG	ACGACTGGGT	TTGGATTGAG	AAGAGGATTA	120
TTATACACCA	CAAAAGGTGG	ATGTTCCCAA	GGCCTTGATT	ATTGTTGCAG	TTCAATGTGG	180
CTGTGATGGG	ACATTTCTGT	TGACCCAGTC	AGGCAAAGTG	CTGGCCTGTG	GA CTCAATGA	240
ATTCAATAAG	CTGGGTCTGA	ATCAGTGCAT	GTCGGGAATT	ATCAACCATG	AAGCATACCA	300
TGAAGTTCCC	TACACAACGT	CCTTTACCTT	GGCCAAACAG	TTGTCCTTTT	ATAAGATCCG	360
TACCATTGCC	CCAGGCAAGA	CTCACACAGC	TGCTATTGAT	GAGCGAGGCC	GGCTGCTGAC	420
CTTTGGCTGC	AACAAGTGTG	GGCAGCTGGG	CGTTGGGAAC	TACAAGAAGC	GTCTGGGAAT	480
CAACCTCGAG						490

(2) INFORMATION FOR SEQ ID NO:240:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 425 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:240:

GAATTCGGCC	TTCATGGCCT	ACTTCTGGAC	TCTATAGAAC	CCACTGCCTC	CTGATGAAGT	60
CCCTACTGTT	CACCCTTGCA	GTTTTTATGC	TCCTGGCCCA	ATTGGTCTCA	GGTAATTGGT	120
ATGTGAAAAA	GTGTCTAAAC	GACGTTGGAA	TTTGCAAGAA	GAAGTGCAAA	CCTGAAGAGA	180
TGCATGTAAA	GAATGGTTGG	GCAATGTGCG	GCAAACAAAG	GGACTGCTGT	GTTCCAGCTG	240
ACAGACGTGC	TAATTATCCT	GTTTTCTGTG	TCCAGACAAA	GACTACAAGA	ATTTCAACAG	300
TAACAGCAAC	AACAGCAACA	ACAACCTTGA	TGATGACTAC	TGCTTCGATG	TCTTCGATGG	360
CTCCTACCCG	TTTCTCCAC	TGGTTGAACA	TTCCAGCCTC	TGTCTCCTGC	TCTAGGATCC	420
TCGAG						425

(2) INFORMATION FOR SEQ ID NO:241:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 461 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:241:

GAATTCGGCC	TTCATGGCCT	AACCAGAACT	AATTTGCTAA	GTCTTTTGTT	TAGTCCTGCA	60
AGACTGATGC	TTAATACACA	GTCTGTTCTC	CTGTGTCTAG	GTCAGGAACT	CCAGTTTGCT	120
TTTCTGTTTT	GTGTCCTGGT	AGCAGCTGTT	GAGTAACTTT	CATTGGAGGT	TGGGAAGGAA	180
GTGAGGAGAA	AGTGTTCTTG	TTTAGTGTTT	TATTTCCCTAT	AATAGGATGC	TGCCTAACCC	240
AGTTCATCTC	TATGTCCTGT	TCACTGAATA	TTCCGGGTAA	TTGAAAGAAA	ATATAATGGA	300
TGGGCTCCAT	TAAAACCAGC	TCAAAAATAA	ATTCTTGTC	GTAAAGATT	CTTGTCAAGA	360
TGTCTTGGAT	TGCACTTTTG	TTGAGGAAAG	ACAGTGTA	TAGTTAAAGA	ATGTTGATAA	420
AATTGAAACA	TTTGGTTGTG	GAATTGTGTG	TGGTACTCGA	G		461

(2) INFORMATION FOR SEQ ID NO:242:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 508 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:242:

GAATTCGGCC	TTCATGGCTT	ATGGACAAGG	AAGCATTCAG	AGCATGGTGT	CATCTGACTC	60
CACATCACCA	GATTCTTCTT	TAACAGAAGA	ATCACGTTCT	GAGACAGCCA	GTAGTTTATC	120
CCAGAAGATT	TGTAATGGGG	GATTATCTCC	TGGTAACCCA	GGAGATTCTA	AGGACATGAA	180
GGAAATTGAG	CCCAATTATG	AAAGTCCCTC	TAGTAATAAT	CAGGATAAAG	ATTCATCACA	240
GGCTTCCAAA	AGCTCAATAA	AAGTTCCAGA	GACCCACAAA	GCAGTCCTTG	CTCTCCGATT	300
AGAAGAGAAA	GATGGCAAGA	TTGCTGTACA	AAGTGAAG	GAAGAAAGTA	AAGCCTCTAC	360
AGATGTTGCT	GGGCAAGCAG	TAACCATAAA	CCTTGTCCTC	ACAGAAGAGC	AAGCAAAACC	420
TTACCGAGTT	GTGAACCTGG	AACAGCCATT	GTGCAAGCCA	TATACTGTCT	TGGATGTGTC	480
AGCAGCCATG	GCCAGTGAGC	ACCTCGAG				508

(2) INFORMATION FOR SEQ ID NO:243:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 323 base pairs
- (B) TYPE: nucleic acid

(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:243:

GAATTCGGCT TCATGGCCTA GGTTTTCTGT ACATGGAGAT TAAACTGTCT TCCAAAGTGA	60
AGAGTTTATT GTTCTAGATC TTGAGCACAA AGGTTGGTAT ACGTTAATAA AAAAAATAGC	120
AAGGGAAGAA AATCATTTCC TTCATACCAA GTAAGAGAGC ACTTATCATG GTAGGCACTG	180
GCTTTGCAAT TATGAGACCA GTAGTAGAAA TAGCTTTAGT TTCCTCAATT TTCCTGGAGT	240
ATTCTTCAGA CTTTCTTAC ACTGCTCAAG GTGGGGCGAG TGGCAGGGCG GACCCTGGCG	300
ACCTGACGCT GCGGAGGCTC GAG	323

(2) INFORMATION FOR SEQ ID NO:244:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 396 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:244:

GAATTCGGCC TTCATGGCCT AGCTTCAGTA GCAAATAAGG ACATCATCTG CTATAACCTA	60
CAAGCAAGTTG GACAGATATT CTACATTTCC TCATTTCTCT ACACCGTCAA TTACATCTGG	120
TATTTGTACA CAGAGCTGAG GATGAAACAC ACCCAGAGTG GACAGAGCAC ATCTCCACTG	180
GTGATAGATT ATAATTGTCG AGTTGGTCAA ATGGCCTTTG TTTTCTCAAG CCTGATACCT	240
CTGCTATGTA TGACACCTGT ATTCTGTCTG GGAAATACTA GTGAATGTTT CCAAACTTC	300
AGTCAGAGCC ACAAGTGTAT CTTGATGCAC TCACCACCAT CAGCCATGGC TGAACCTCCA	360
CCTTCTGCCA ACACATCTGT CTGTAGCACA CTCGAG	396

(2) INFORMATION FOR SEQ ID NO:245:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 370 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:245:

GAATTCGGCC TTCATGCTTA GCCTCAGCTC TTTCTTCTGG GTTGTTTGTA TTTTCTTTTC	60
TGTCCCAAAC AGTTTCCCCC AAAAAAGAA CTTTATGTCT TTCTCTGTCT TCCCTCAGTC	120
CTTCCAGTCA GCAGCCTGTG ATTGGGCTTT TCCCCTCAGA AACGAACAAT CCAGAACCCA	180
CTGTTTAAAA CAACTGTATT TTGCCTTGGG AAGTCCCATT GCCTTCCCTG AAAACATTAA	240
ACATTCTCTC GATCCCCAGC CTGAGTCTCT CTGTCTCTGG GCCCCATCCT GCTCCACAGC	300
AGGGCTGGTG TGTCCAGCAC AGAGTGACCC TCCGATGCC TTTCCCACCC GCCGCCCTGC	360
CTCCCCTCGAG	370

(2) INFORMATION FOR SEQ ID NO:246:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 367 base pairs
(B) TYPE: nucleic acid

(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:246:

GAATTCGGCC	TTCATGCCTA	GAGAACTTGA	AGCTTTGCGG	CAGGAATTTA	AAAAGAAAGA	60
CAAGACGTTG	AAAGAGAATT	CCAGAAAGTT	GGAGGAAGAA	AATGAGAATC	TCCGAGCAGA	120
GCTACAGTGT	TGTTCTACAC	AAC TGGAATC	CTCTCTCAAC	AAATACAACA	CCAGCCAGCA	180
AGTCATCCAA	GACTTGAATA	AAGAGATAGC	CCTTCAGAAG	GAGTCCTTAA	TGAGCCTGCA	240
GGCCAGCTG	GACAAAGCTC	TGCAGAAGGA	GAAGCACTAT	CTCCAGACTA	CCATCACCAG	300
AGAAGCCTAT	GATGCATTAT	CCC GGAAGTC	AGCCGCCTGC	CAGGATGACC	TGACACAAGC	360
CCTCGAG						367

(2) INFORMATION FOR SEQ ID NO:247:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 450 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:247:

GAATTCGGCC	TTCATGGCCT	ACGGCTTCAT	AGTAACTCTT	TGCCATATCT	CTAGCCAGCT	60
GCATAAAACG	TTCGCCATCA	GATGGAGACA	AAAGGTTTAA	AATACGCCTA	TAACCATCCA	120
TGGCCATTTT	ATGATCACCC	ATCTGTTTAT	AAAGGCTTGA	TCGCTCCCAC	AGATAACGGA	180
CATTAGTAGG	TTCATATTTA	AGAGCTTTTG	TATAGCAAAA	AATAGCCTGC	TTAATATTGT	240
CTTGTCCAG	AGACATTTCT	GCCAGTCTAA	CCCATCTTTC	TGTGTCACTG	GGATTAAAT	300
GCGCAGCAAT	CAACTCAAAC	TGCAATGATT	TTTCCATGTC	ACCTTGGTCC	TCATATATCA	360
TGGCTAGAGT	AGAGAATGGC	TCATAAGCCA	GAGGAGCTTG	TCTTATGATT	TCCATGCACA	420
TCAATATCGC	CTCTTCACGT	TCTCCTCGAG				450

(2) INFORMATION FOR SEQ ID NO:248:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 408 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:248:

GAATTCGGCC	TTCATGGCCT	AACGAACTG	ACGTCTACCT	CATGGGGCTG	CTGTGTGGGT	60
TTGGGAGGCA	AAAATCTATG	AAGGGTTTTT	TGAAATCCCA	TAGGTGCCAC	ATCTATGAGA	120
TGTTTGATAA	ATGTGAATAT	GCTTTTACAT	TTGGGCTTAT	CTAATTGCA	ATAAGAGAGC	180
CTCTCTCTAT	CAACACCAGC	TTCTCTCTCG	GGCTGTTTGC	TCAGGGAAGG	CAAGAAAGCC	240
ACGTGCTGGC	CCTCTGCCTT	CTCTAAAGTG	CTGTTGGAGC	ATGGAGGAGC	TGGAGGAGAT	300
GGGGATGGAC	TGACAGCTAA	GAGGGCGGCT	GCTGGGACTA	GATAGTGGAT	GAAGAAAGAA	360
GGACGAGGAA	GCCGTGGGGC	AGCCTCTTCA	CATGGGGACG	AACTCCAG		408

(2) INFORMATION FOR SEQ ID NO:249:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 562 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:249:

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GCCCATGACA GAGAGCAGTG CCAAAGACAT GCGGTACGAA CATCTGATAG ATGACTTATT      60
GGCTGCTCAG AAGGAAATTC TGTCTCAGCA GGAAGTCATC ATGAAGTTAA GGAAAGACCT      120
TACCGAAGCC CACAGCAGAA TGTCGGATTT GAGAGGGGAG CTAAACGAGA AGCAGAAGAT      180
GGAAC TGGAG CAGAACGTGG TGCTGGTCCA GCAGCAGAGC AAGGAGCTGA GTGTGCTCAA      240
GGAGAAGATG GCCCAGATGA GCAGCCTGGT AGAAAAGAAA GATCGGGAGC TGAAGGCCCT      300
TGAGGAGGCA CTCAGGGCTT CCCAAGAGAA ACACAGACTC CAGCTGAACA CAGAGAAGGA      360
ACAGAAGCCC CGGAAGAAGA CCCAGACGTG TGACACCTCT GTGCAGATAG AACCCGTCCA      420
CACTGAGGCC TTCTCCAGCA GCCAAGAGCA GCAATCCTTC AGCGATCTAG GGGTCAGGTG      480
CAAAGGGTCC CGGCACGAGG AGGTCATTCA GCGTCAGAAA AAGGCCTTAT CTGAACTTCG      540
AGCGCGAATT AAAGAACTCG AG                                         562

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(2) INFORMATION FOR SEQ ID NO:250:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 313 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:250:

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GAATTCGGCC TTCATGGCCT ACCCAAACAG ACAGAAAACG CCACGAGGCA AGTGTAAGTCT      60
CTCACAGCCT GGACCCCTCG TCAGCAGTCC ACATAGCAGG TCCACAAAAG GTGGCTCCGA      120
TTCCTCCCTT TCTGAGCCAG GGCCAGGTCG GTCCGGCCGC GGCTTCCTGT TCAGAGTCTC      180
CCGAGCAGCT CTTCCCTTC AGCTTCTCCT GCTCCTCCTC ATCGGGCTTG CCTGCCTTGT      240
ACCAATGTCA GAGGAAGACT ACAGCTGTGC CCTCTCCAAC AACTTTGCCC GGTCAATCCA      300
CCCTATGCTC GAG                                         313

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(2) INFORMATION FOR SEQ ID NO:251:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 291 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:251:

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GTCTTGACAA AACCTAACTT GCGCAGAAAA CAAGATGAGA TTGGCATGGC TTTATTTGTT      60
TTTTTTGTTT TGTTTGGTTT TTTTTTTTTT TTTTGGCTTG ACTCAGGAGA TCCCTCCCCG      120
GGGCTCCCGC CGGCTTCTCC GGGATCGGTC GCGTTACCGC ACTGGACGCC TCGCGCGGCC      180
CATTTCCGCC ACTCCGATT CGGGGATCTG AACCCGACTC CCTTTCGATC GGCCGAGGGC      240
AACGGAGGCC ATCGCCCGTC CCTTCGGAAC GCGCTCGCC CAACTCTCGA G                                         291

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(2) INFORMATION FOR SEQ ID NO:252:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 384 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:252:

CGGGAAATGA AGCGGAAGCA GCGGAGTCC GAGAGGCCCA TCTTGCCAGC CAATCAGAAG	60
CTCATTACTT TATCAGTGCA AGATGCACCC ACAAAGAAAG AGTTTGTTAT TAACCCCAAC	120
GGGAAATCCG AGGTCTGCAT CCTGCACGAG TACATGCAGC GTGTCCTCAA GGTCCGCCCT	180
GTCTATAATT TCTTTGAATG TGAGAACCCA AGTGAGCCTT TTGGTGCCTC GGTGACCATT	240
GATGGTGTGA CTTACGGATC TGGAAGTGA AGCAGCAAAA AACTTGCAGG GAATAAAGCT	300
GCCCCGAGCTA CACTGGAAAT CCTCATCCCT GACTTTGTTA AACAGACCTC TGAAGAGAAG	360
CCCAAAGACA GTGAAGAACT CGAG	384

(2) INFORMATION FOR SEQ ID NO:253:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 276 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:253:

GGGACGTTGG TGTTGAGGTT GGCATACGTA TCAAGGACAG TAACTACCAT GGCTCCCGAA	60
GTTTTGCCAA AACCTCGGAT GCGTGGCCTT CTGGCCAGGC GTCTGCGAAA TCATATGGCT	120
GTAGCATTCG TGCTATCCCT GGGGGTTGCA GCTTTGTATA AGTTTCGTGT GGCTGATCAA	180
AGAAAGAAGG CATACGCAGA TTTCTACAGA AACTATGATG TCATGAAAGA TTTTGAGGAG	240
ATGAGGAAGG CTGGTATCTT TCAGAGTGTA CTCGAG	276

(2) INFORMATION FOR SEQ ID NO:254:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 497 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:254:

GAGTTTGTG GGCTTACCTT ATTTTAATTA AAAAGAAGTC GGGGCTACCA GGGGTTTCAG	60
ACGTGCTCGA TGGACACGTG ATTTGTAAAC AGCCAAGATT CTGGGGGACG GGGGGGTGCC	120
TCGGTGGGGT TGACATTTGA GTTACAGGGA CTTAATAATG GCCAGCCTTT CACATCCCAT	180
GGGAAACCGC CCCCCGGGC CTTGGAGAAT GGGGGTCCAA GTGCCTATCC CCCTTTGGAT	240
GTAAAATTCA TCGTTAGTAA ACATCATCCG CCCAGCAACA AGCAAAGCAC ATCGCAAGAT	300
TAAAACAAAG AATCCGCCGT GAACAGAAGG CCTCCATCTC TGCTCTCAGG CAGGTGTCCT	360
TCAGGGAGGA GCCTCAGGCA GCTGTTCTAA CCCTGCTGCC AACGCCTGGG CTGTTTCTGC	420
CGACAATCTT CTATTTCTCT AAAAGAGTAC GCTGAACAGC TGGCTCTGCG TTGATTGAAT	480
TCTAGACCTG CCTCGAG	497

(2) INFORMATION FOR SEQ ID NO:255:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 470 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:255:

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GAATTCGGCC TTCATGGCCT AGAGAACCGT TGCTTTTCCG AGTTGCTCTT CTTCCAGGCT      60
CCGTGGGTGG TCGGCATGGC CCGTGGAAT CAACGAGAAC TTGCCCAGCA GAAAAACATG      120
AAGAAAACCC AGGAAATTAG CAAGGGAAAG AGGAAAGAGG ATAGCTTGAC TGCCTCTCAG      180
AGAAAGCAGA GGGACTCTGA GATCATGCAA GAAAAGCAGA AGGCAGCTAA TGAGAAGAAG      240
TCTATGCAGA CAAGAGAAAA GTGATGACTG GCTATTTGGA AAACCTGGGT GCTACTGCCA      300
ACTGGGTGTA TCATAAGCTC TAAGATCAAG ATTTTGTAGA GTGGACAGTC ATTACATATG      360
TTATAACTTA TCCTTTAAAA ACTATTTTAA ACTTTATCCT TTCAGCTTTA CTTAGTGCGA      420
TGTTTTAGAA GCAGTCTTCA AAGAATAAAA CACTAACCAT GCTGCTCGAG      470

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(2) INFORMATION FOR SEQ ID NO:256:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 388 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:256:

```

GAATTCGGCC TTCATGGCCT AATTTGTAT TTTTAGTGGA GACGGGGTTT CTCCATGTTG      60
GTCAAGCTGG TCTTGAAGTC CCAACCTCGG GTGATCCGCC CGCCTTGGCC TCCCAAAGTG      120
CTGGGATTAC AGGCGTGAGC CACCGCGCCT GGCCAGTAGT TTCTTAACAT TAAATTATCC      180
GCAAATGGA AGAAATACTA GAGGTCTGTG AGGATGTTTC TTCTCTTTCA GTCTGTTGTG      240
GTGGTTTGTA GTTACAGGG GCTTGGGTAA CTGGATTTT AGGTTTATTA TTTAAATAG      300
TAGACTCAAC ACTATTTTGT ATTGCAGTAG AGATCACTTA TGCAGATCTT TTTAATACCA      360
TTTCATAGAG ATTAAGGGTC ACCTCGAG      388

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(2) INFORMATION FOR SEQ ID NO:257:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 333 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:257:

```

GAAACAGGGC TCAAAGAAGT GGTAAGTCT GTGGAGGAAA TGACAAGTAA AGGAAAACCA      60
GGACAAGAAG TCTTGGAAGA CGACCAGGAA AATACTTTAA AATATGAGTA TGAAGAAGAC      120
TTTGAAGTAG ATGAGGAGAA ACAAGGTGAA AAATCTAATG AAGAAGGACA GGCTGATGTT      180
CAAATGAATG GAATACCGCA GTCACCTTTG GATGATAAAA AAGATAATTT AGACCCTGAA      240
AAAGAGAGTG AAACCTCATC ACAGAAGGCA CCAGATGCCC GTGACAATGT GAAAGATGAG      300
AATGATGGAT GCTCTGAGAG TGAACGTCTC GAG      333

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(2) INFORMATION FOR SEQ ID NO:258:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 544 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:258:

CACAGTGCTG	GNTCACAACA	AGATGNTCNA	GGTGTGAGCC	GTACTGTGTG	TGTGTGCAGC	60
CGCTTGGTGC	AGTCAGTCTC	TCGCAGCTGC	CGCGGCGGTG	GCTGCAGCCG	GGGGGCGGTC	120
GGACGGCGGT	AATTTTCTGG	ATGATAAACA	ATGGCTCACC	ACAATCTCTC	AGTATGACAA	180
GGAAGTCGGA	CAGTGAACA	AATTCCGAGA	CGATGATTAT	TCCCGCACTT	GGAGTCCAGG	240
AAAACCCTTC	GATCAGGCTT	TAGATCCAGC	TAAGGATCCA	TGCTTAAAGA	TGAAATGTAG	300
TCGCCATAAA	GTATGCATTG	CTCAAGATTC	TCAGACTGCA	GTCTGCATTA	GTCACCCGAG	360
GCTTACACAC	AGGATGAAAG	AAGCAGGAGT	AGACCATAGG	CAGTGGAGGG	GTCCCATATT	420
ATCCACCTGC	AAGCAGTGCC	CAGTGGTCTA	TCCCAGCCCT	GTTTGTGGTT	CAGATGGTCA	480
TACCTACTCT	TTTCAGTGCA	AACTAGAATA	TCAGGCATGT	GTCTTAGGAA	AACAGAATCT	540
CGAG						544

(2) INFORMATION FOR SEQ ID NO:259:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 393 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:259:

GAATTCGGCC	TTTCATGGCCT	ACATCAGCAT	CCCTGGGAGC	ATCAGAAATG	CAGAGCTCAG	60
GCCCGCCCCG	GAGCTACCGA	ATCAGAACCT	ACATTTTACA	CACCCCTCAG	CTCAGAGCTT	120
GTTTCTCCCT	GGATTCCATG	GCCCTGTGCT	GCTGGCAGCC	CGGGGTTAGG	GCATTTCTGT	180
GTCACCTGGC	GACGGTGAAG	CCTAGTTTCC	TCCAGAGAGA	TTATGCTGCT	CTCCATCCAA	240
GTGAAGTGGC	AATGGTGCCA	GCCTGAGATT	TCTGCCCTGA	GTTTTAAGTA	CGAGAGTGTG	300
GGCTGACAAT	AACTCCTTT	ATTCTACCCT	CTTCTGTTCT	CATAAGGAGA	AATTTAAATT	360
CTGGAAGAGA	TGAAGCTTGC	ATTTACCCAA	GAC			393

(2) INFORMATION FOR SEQ ID NO:260:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 705 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:260:

GAATTCGGCC	AAAGAGGCCT	AAGGGATTGT	TATTCCTTTA	AAAAAAAACC	AATACCAAAG	60
AAGCCTACAA	TGTTGGCCTT	AGCCAAAATT	CTGTTGATTT	CAACGTTGTT	TTATTCACCT	120
CTATCGGGGA	GCCATGGAAA	AGAAAATCAA	GACATAAACA	CAACACAGAA	CATTGCAGAA	180
GTTTTTAAAA	CAATGGAAAA	TAAACCTATT	TCTTTGAAA	GTGAAGCAAA	CTTAAACTCA	240
GATAAAGAAA	ATATAACCAC	CTCAAATCTC	AAGGCGAGTC	ATTCCCCTCC	TTTGAATCTA	300
CCCAACAACA	GCCACGGAAT	AACAGATTTT	TCCAGTAACT	CATCAGCAGA	GCATTCTTTG	360

GGCAGTCTAA	AACCCACATC	TACCATTTC	ACAAGCCCTC	CCTTGATCCA	TAGCTTTGTT	420
TCTAAAGTGC	CTTGAATGC	ACCTATAGCA	GATGAAGATC	TTTTGCCCAT	CTCAGCACAT	480
CCCAATGCTA	CACCTGCTCT	GTCTTCAGAA	AACTTCACCT	GGTCTTTGGT	CAATGACACC	540
GTGAAACTC	GTGATAACAG	TTCCATTACA	GTTAGCATCC	TCTCTTCAGA	ACCAACTTCT	600
CCATCTGTGA	CCCCCTTGAT	AGTGGAACCA	AGTGGATGGC	TTACCACAAA	CAGTGATAGC	660
TTCACTGGGT	TTACCCCTTA	TCAAGAAAAA	ACAACCTCTAC	CTACC		705

(2) INFORMATION FOR SEQ ID NO:261:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 729 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:261:

GAATTCGGCC	AAAGAGGCCT	ACCTTACTTG	AGTCCACAGG	CAAGGCCCAA	TAATGCATAT	60
ACTGCCATGT	CAGATTCCTA	CTTACCCAGT	TACTACAGTC	CCTCCATTGG	CTTCTCCTAT	120
TCTTTGGGTG	AAGCTGCTTG	GTCTACGGGG	GGTGACACAG	CCATGCCCTA	CTTAACCTTCT	180
TATGGACAGC	TGAGCAACGG	AGAGCCCCAC	TTCCTACCAG	ATGCAATGTT	TGGGCAACCA	240
GGAGCCCTAG	GTAGCACTCC	ATTCTTGTT	CAGCATGGTT	TTAATTTCTT	TCCCAGTGGG	300
ATTGACTTCT	CAGCATGGGG	AAATAACAGT	TCTCAGGGAC	AGTCTACTCA	GAGCTCTGGA	360
TATAGTAGCA	ATTATGCTTA	TGCACCTAGC	TCCTTAGGTG	GAGCCATGAT	TGATGGACAG	420
TCAGCTTTTG	CCAATGAGAC	CCTCAATAAG	GCTCCTGGCA	TGAATACTAT	AGACCAAGGG	480
ATGGCAGCAC	TGAAGTTGGG	TAGCACAGAA	GTTGCAAGCA	ATGTTCCAAA	AGTTGTAGGT	540
TCTGCTGTTG	GTAGCGGGTC	CATTACTAGT	AACATCGTGG	CTTCCAATAG	TTTGCTCCA	600
GCCACCATTG	CTCCTCCAAA	ACCAGCATCT	TGGGCTGATA	TTGCTAGCAA	GCCTGCAAAA	660
CAGCAACCTA	AACTGAAGAC	CAAGAATGGC	ATTGCAGGGT	CAAGTCTTCC	GCCACCCCCA	720
ACACTCGAG						729

(2) INFORMATION FOR SEQ ID NO:262:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 686 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:262:

GAATTCGGCC	AAAGAGGCCT	ACTACCATGT	CCTCTTGGAG	CAGACAGCGA	CCAAAAAGCC	60
CAGGGGGCAT	TCAACCCCAT	GTTTCTAGAA	CTCTGTTCTT	GCTGCTGCTG	TTGGCAGCCT	120
CAGCCTGGGG	GGTCACCCTG	AGCCCCAAAG	ACTGCCAGGT	GTTCCGCTCA	GACCATGGCA	180
GCTCCATCTC	CTGTCAACCA	CCTGCCGAAA	TCCCCGGCTA	CCTGCCAGCC	GACACCGTGC	240
ACCTGGCCGT	GGAATTCTTC	AACCTGACCC	ACCTGCCAGC	CAACCTCCTC	CAGGGCGCCT	300
CTAAGCTCCA	AGAATTGCAC	CTCTCCAGCA	ATGGGCTGGA	AAGCCTCTCG	CCCGAATTCC	360
TGCGGCCAGT	GCCGCAGCTG	AGGGTGCTGG	ATCTAACCCG	AAACGCCCTG	ACCGGGCTGC	420
CCTCGGGCCT	CTTCCAGGCC	TCAGCCACCC	TGGACACCCT	GGTATTGAAA	GAAAACCAGC	480
TGGAGGTCCT	GGAGGTCTCG	TGGCTACACG	GCCTGAAAGC	TCTGGGGCAT	CTGGACCTGT	540
CTGGGAACCG	CCTCCGGAAA	CTGCCCCCGG	GGCTGCTGGC	CAACTTCACC	CTCCTGCGCA	600
CCCTTGACCT	TGGGGAGAAC	CAGTTGGAGA	CCTTGCCACC	TGACCTCCTG	AGGGGTCCCG	660
TGCAATTAGA	ACGGCACATT	CTCGAG				686

(2) INFORMATION FOR SEQ ID NO:263:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 571 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:263:

GAATTCGGCC AAAGAGGCCT AGGAGAGAGG AGGTGCTGCA AGACTCTCTG GTAGAAAAAT	60
GAAGAGGGTC CTGGTACTAC TGCTTGCTGT GGCATTTGGA CATGCTTTAG AGAGAGGCCG	120
GGATTATGAA AAGAATAAAG TCTGCAAGGA ATTCTCCCAT CTGGGAAAGG AGGACTTCAC	180
ATCTCTGTCA CTAGTCCTGT ACAGTAGAAA ATTTCACAGT GGCACGTTTG AACAGGTCAG	240
CCAAGTTGTG AAGGAAGTTG TCTCCTTGAC CGAAGCCTGC TGTGCGGAAG GGGCTGACCC	300
TGACTGTTAT GACACCAGGA CCTCAGCACT GTCTGCCAAG TCCTGTGAAA GTAATTCTCC	360
ATTCCCCGTT CACCCAGGCA CTGCTGAGTG CTGCACCAA GAGGGCCTGG AACGAAAGCT	420
CTGCATGGCT GCTCTGAAAC ACCAGCCACA GGAATTCCCT ACCTACGTGG AACCCACAAA	480
TGATGAAATC TGTGAGGCGT TCAGGAAAGA TCCAAAGGAA TATGCTAATC AATTTATGTG	540
GGAATATTCC ACTAATTACG GACAGCTCGA G	571

(2) INFORMATION FOR SEQ ID NO:264:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 313 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:264:

GAATTCGGCC AAAGAGGCCT ACCAAGCAAG AACAGCTAAA ATGAAAGCCA TCATTCATCT	60
TACTCTTCTT GCTCTCCTTT CTGTAAACAC AGTCACCAAC CAAGGCAACT CAGCTGATGC	120
TGTAACAACC ACAGAACTG CGACTAGTGG TCCTACAGTA GCTGCAGCTG ATACCACTGA	180
AACTAATTC CCTGAACTG CTAGCACCAC AGCAAATACA CCTTCTTTCC CAACAGCTAC	240
TTCACCTGCT CCCCCATAA TTAGTACACA TAGTTCTCTCC ACAATTCTTA CACCTGCTCC	300
CCCCATACTC GAG	313

(2) INFORMATION FOR SEQ ID NO:265:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 343 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:265:

GAATTCGGCC TTCATGCCTA GCCTCTGAGT TCAGCTCAGA ACACAGATGA TCTCATTGAT	60
TCCTCACGTC AACCTTGGGA AATCTGGGTA CCCTGGGACG TCCACACATG AGGACCGAGG	120
CTCAGGGACA TCAAGGGACT GGCCTGGTCC CAGAAACAGG GAGTAAAATG GGAAGTAAAC	180
TCAGTCCCAC GTCTGCCTGA CTCCAGAGTT TGGGCCACTG AACCATGCGG CTGCCATCTT	240
GGAGTTCTTT GAGCTGTGAA GTGCTGTGCA TCGTGTGATT CTGTGTCCCT TTTGTGCAGG	300
TACCAGGATT TCTATGCATT CGACCTGTCA GGAGCCACTC GAG	343

(2) INFORMATION FOR SEQ ID NO:266:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 340 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:266:

GAATTCGGCC TTCATGGCCT ACAGGAAGCA CAGAAAGACA AAATTGGAAA TGTCTAGTTC	60
CATGTTGATG CCTTCAGAAG ATGCAGGTGA ACAAAGAGAG GCCGGGAAAT CAGAGCTAGT	120
TGAAACCCAA CATGTTACCT TAGAGCCAGA GCTACCACTG AGTTCTCTAA GCACAGTCAA	180
ATCCCAGGAT TATGCTGAAA CAGAGCAGGA GGTCATTTTA CAAGCTATAG AGGCCATGGA	240
GGCCACAGAA GCCCTGGAGG CCACAGACGC CATGGAAGCC ATAGATCAAG GTAGCATGAA	300
AGATTATGGA GATG ^{TT} GATCT CTAAGCTGGA AAGACTCGAG	340

(2) INFORMATION FOR SEQ ID NO:267:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 367 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:267:

GAATTCGGCC TTCATGGCCT AGGCACCCCT AGGCGACTCA GGGTTCGGGG AGGAGGAGAC	60
CAGACGGGGC CTTGGCTGGC ATGGCCTCTT CACAGGGCTG CCGTGAAGAA ACTTCGTGAC	120
AGCGGCGGAG AGGTGGCCCA GGAGTGAGAC AAGCAGGCCC CGGGCCTTGG ACTCAGACAT	180
GCTGGGTCCG GTCAGGCCCG TGTGGGAACC AGTGTTTTAG GGACTGGGTA CTCTCTTAGA	240
GAAGAAGTGA TGCTAAAGAG TCAGGAAGAC ACGAGCGGGC CAAATAAAAG AGGAAGAGAG	300
GCCCTCAGGA CATCATGGCA CTTACTGCTT GGATTGTCT CCCCCTCCAG AATTCTGTGG	360
ACTCGAG	367

(2) INFORMATION FOR SEQ ID NO:268:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 320 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:268:

GAATTCGGCC TTCATGGCCT ACTTGGGAAT TAACATCTTC GATAAATCCC AGAAGTCTTT	60
AAGTGACAGT AGAGAGCCTA CAGAGAAGCC TGGGAAAGCA GAAAAATCTA AGAGCCCAGA	120
AAAAGTGTCA TCGTTCTCAA ACTCCTCCTC CAACAAGGAA TCAAAAGTAA ACAATGAGAA	180
GTTTCGTA CT AAGAGCCCCA AGCCTGCCGA AAGCCCCCAG TCAGCCACTA AGCAGTTGGA	240
TCAGCCCACT GCTGCTTATG AGTATTATGA TGCTGGCAAT CACTGGTGCA AAGACTGCAA	300
CACCATCTGT GGGACTCGAG	320

(2) INFORMATION FOR SEQ ID NO:269:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 542 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:269:

GAATTCGGCC AAAGAGGCCT AGGGATATTT ACTGAGGGCC TACAGGGTGC CCAATACTGA	60
GCTAGCTAGG CTCAGGGACC TGTACACACA TGCATTCTCC ATTAGGGTTC TGCAATCCTG	120
ACACTATTAC TATCCTCAAG GACTCTGCGC ATCCAGACCC GTCTATTAGT TAGCAATGAG	180
AACCCCTGCC ATGGCCAAGT TACACAAGAA CACCCTTGCC CTACCTCTGC CCCCTGCNGA	240
TCTGAAAGTA ACCTGGTCTG AAAGAGAAGT AAAGATGTGG CTGTCCCTGG GTGCTAGGGA	300
GAGAGGCCTG TTGACAAAGC CACCAGCTGT CTCCAGTCAG AGCCAGGGAG ACAGGCTTCT	360
CCCTGCACCA TCCGCACTGC CATAGACACA GCAGCCAGCA ACAGCACTG GACCATTACG	420
GAGTTCAGG CCCAGTCTCC AACTGACCTC CCTCTGCTC CAGCTGCCCC TGCTAACAAG	480
AGCCAGGGCA CAAGACCTCA CTTGGAACAA GTACCAGGCA GAAGAGAGCA TNACCNGCCG	540
GT	542

(2) INFORMATION FOR SEQ ID NO:270:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 613 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:270:

GAATTCGGCC AAAGAGCCTA GTCGATTGAA TTCTAGACCT GCCTCCTTTT CCACTTGAAT	60
TGTTAAATG TTTACTCCAG CATCTTTAAG TATTCCTGTA ACCTGCTGTA CTATTCTTTG	120
TTCTAGCACA TCAGATGTCA CCTGTATATG AATTGTTTCT GCCACAATAC TAGCAGAATG	180
ACGCCAAAAA TGTGGGTCTC GGTATGATAT TAATCCTTCA ATTTTCTGTA TCTTTTCTAA	240
AGCAATATGT AGTTCTTTTT CATATTCTGG TGGCAATCTC AGGAGTAGAA CCTGGCAGGC	300
ATCTTTAATC AGTGGAACAA CACTGAGAAA TATTAATATA GCAATAAAAA GAGAACAGAG	360
TGGGTCAGCG ATGAACCATC CAAACTGCTC TATAAGAACT GTGGATACGA TCACACCAAT	420
GCTGCCAAGA GTATCTGCCA AAACATGTAG AAATACACCC CTCATGTTAG CATTATGCC	480
TCCACCCGCA GATCCGTGGC TGTGACCATG CCCATGGTCA CTGTGTCCAT GCATATGATG	540
TGAATGGCTG TGATCAGATG AGTGACAGCT TCCTTGAGCC TAAACCGTCG ATTGAATTCT	600
AGACTGCCTC GAG	613

(2) INFORMATION FOR SEQ ID NO:271:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 763 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:271:

GAATTCGGCC AAAGAGGCCT AGTCTGGTTC TTGCTTGATC TGAGAGCTTC CATCAGTCTC	60
TTTTATTTCT TCTGTGGCTG GAACTTCCAA CTGGCTTGGT TCAGCTGATT CTTGTATCAC	120

GGGGCCTTCT	GACTCACTCT	GATCAACCAG	CTGGTTATTA	ATCACAAAGTC	CTGGAAATGG	180
TCTAATGACC	GTGAATTTGA	TAAACTCGGC	AGAGTCTAAG	ATCCTTCTCA	TGGAGCTGAT	240
TTCCAGGTAG	CTGGGGGCTT	TGAAAGGACA	CCCCCGGGGG	CATGCCATCA	ACTACCACAC	300
AGCCAGGGTT	AATTGTGATT	TCCCTGTAGG	GAACTTTCAC	AGGAAAACCC	ATACCAATAG	360
CTTCACCAA	TTTCCGACTA	AAGAGGTCAT	TCACTTGTTT	TCTTAGCTGT	CTAGCTTTTT	420
CAACTTTCGA	GAGTCTTTCA	TTATCATCAT	CTGGAATTGT	CACCTGAATG	ATGTTAAGGT	480
CTTCAACACC	TGATGCAGTA	GTATTAACAT	TGGGTGATGA	ATTTATTTT	CTGGGAGGGC	540
TCTTAGAGGA	GGTGCTCTCC	TTAATCGCCG	TCTCAAACAT	TTCGGGCTTT	TTAATGATGA	600
ACTTAATTTT	GGCTTTGTTT	CTGAGTATCT	TCTCCAGCCT	CGGAATGCCA	AAAGTCGATG	660
GTCTTCGGAA	TGGCACACCC	TCAGGTAAGC	CTTCCACATA	AAAGTCTTCC	GGGAAAGACT	720
CAAATAACGC	GAACGGCACC	TTACAGCTT	GTTTAAGGCC	AAG		763

(2) INFORMATION FOR SEQ ID NO:272:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 102 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:272:

GAATTCGGCC	AAAGAGGCCT	AATTAAGGAA	ATACTTTGCA	TAAATTAATC	AGCCCCACAG	60
TATTTCTTA	ATAAGAATAA	AATGAATTTA	ACACTGATTC	TG		102

(2) INFORMATION FOR SEQ ID NO:273:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 565 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:273:

GAATTCGGCC	AAANAGGCCT	ACNCCAGTCA	AGGAAAGTCA	AGTNGCAAGA	AGGAANTGTC	60
TAAAAGAGAT	GGCAAGGAGA	AAAAAGACAG	AGGAGTGACG	AGGTTTCAGG	AAAATGCCAG	120
TGAAGGGAAG	GCCCCTGCAG	AANACGTCTT	TAAGAAGCCC	CTGCCTCCTA	CTGTGAAGAA	180
GGAAGAGAGT	CCCCCTCCAC	CTAAAGTGGT	AAACCCACTG	ATCGGCCTCT	TGGGTGAATA	240
TGGAGGAGAC	AGTGACTATG	AGGAGGAAGA	AGAGGAGGAA	CAGACCCCTC	CCCCACAGCC	300
CCGCACAGCA	CAGCCCCAGA	AGCGAGAGGA	GCAAACCAAG	AAGGAGAATG	AAGAAGACAA	360
ACTCACTGAC	TGGAATAAAC	TGGCTTGTCT	GCTTTGCAGA	AGGCAGTTTC	CCAATAAAGA	420
AGTTCTGATC	AAACACCAGC	AGCTGTCAGA	CCTGCACAAG	CAAAACCTGG	AAATCCACCG	480
GAAGATAAAA	CAGTCTGAGC	AGGAGCTAGC	CTATCTGGAA	AGGAGAGAAC	GAGAGGGAAA	540
GTTTAAAGGA	ATAGGAAATC	TCGAG				565

(2) INFORMATION FOR SEQ ID NO:274:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 188 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:274:

GAATTCGGCC AAAGAGGCCT ACTTAAATCA AGGCCAAAAC TAAGGATTTA GGTAGAGTGT	60
ATTAGCCTTT CAATACCTGC TTATTAAACA GTTGTTTTCA TACTTTTCAA AGGTGTGTAG	120
AAGTTTTGTA AATAAATTTT CTGATAGGAT AACTAGATT CCCTATGATC TCTTATTAT	180
TTATCATT	188

(2) INFORMATION FOR SEQ ID NO:275:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 555 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:275:

GAATTCGGCC AAAGAGGCCT AGTCCGTGAT GCGTACACAC CTGTCGAGCA CGAGCTCCTC	60
TAGGCGGTGC AGGTCGCAGG CCACGTACTC CAGCGCCATG TCGGTGATNC GTGGGCACCA	120
CGAGAGGTCA AGGNTGCCCA GCTTGCGCAG GTTCTCGGCC ACGAGCTCCA CGCCGTCGTC	180
GGTGACCTTG GAGCAGCCCG AGAGGCTGAA CGCGTGAGG TTGGGCAGGN TGTGCACCAC	240
GTGACCACG CCGTGGTTGG TGATCTCCCA GCAGGAGAGC AGGCGCAGCG TGTGCGTGCT	300
GTGGCCCTGG CGCGCCGTGA AGTAGGCCAG CGCCGTGTCC GTCACGTGGT AGGCTGCAG	360
GCTCAGCTCC GCCAGTTGG GCAGCAGCTG CGAGATGGCC GCGATGGCGT CGTCGGCCAC	420
GTTGATGCAG TCACTCACGC TCAGCGAGGT GATGCGCGCG CTCAGGCTGG ACCACAGCCC	480
GGCCTCGGTG AAGTCGTTGC AGCCCGACAG CTCCAGACGC ACCACGCCCT GCATCTGTTC	540
AAGCATAACC TCGAG	555

(2) INFORMATION FOR SEQ ID NO:276:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 496 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:276:

GAATTCGGCC AAAGAGGCCT ACAGTGAATA ATCAGAAGTC AGTTTGGGAG AAGTCAAAAT	60
GGACACAATC TTCTTGTTGA GTCTTCTATT GCTGTTTTTT GGAAGTCAAG CCTCAAGATG	120
CTCAGCTCAA AAAAATACCG AATTGCGAGT GGATCTTTAT CAAGAGGTTT CTTATCTCA	180
TAAGGACAAC ATTATATTTT CACCCCTTGG AATAACTTTG GTTCTTGAGA TGGTACAAC	240
GGGAGCCAAA GGAAAAGCAC AGCAGCAGAT AAGACAACT TAAAAACAAC AGGAAACCTC	300
AGCTGGGGAA GAATTTTTTG TACTGAAGTC ATTTTCTCT GCCATCTCAG AGAAAAACA	360
AGAATTTACA TTTAATCTTG CCAATGCCCT CTACCTTCAA GAAGGATTCA CTGTGAAAGA	420
ACAGTATCTC CATGGCAACA AGGAATTTTT TCAGAGTGCT ATAAACTGG TGGATTTTCA	480
AGATACAAGG CTCGAG	496

(2) INFORMATION FOR SEQ ID NO:277:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 491 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:277:

GAATTCGGCC	AAAGAGGCCT	ACACCCAGAG	ACTGTAATTT	GTGTAGTTTT	TCTTTTTTAA	60
CTTAAAGACA	ACTTTAAAAA	ATACTTACAT	TAATGTTTTT	TATATTCATA	GGTGGGTATA	120
TTCCCTCAT	TCAAATGGCA	GTAGCCTTGG	CTCACATAAG	ACATGTTTCA	TGTGATCTGT	180
ATCCTGGCAT	ACCAGTTATA	TTTTGTGGGG	ACTTTAATAG	TACACCATCA	ACAGGAATGT	240
ATCATTTTGT	CATCAATGGC	AGCATTCCAG	AGGATCATGA	AGACTGGGCT	TCCAATGGGG	300
AGGAGGAAAG	ATGCAATATG	TCTCTTACAC	ATTTCCTCAA	GCTGAAAAGT	GCTTGTGGTG	360
AACCTGCTTA	CACAAATTAT	GTTGGTGGCT	TTCATGGATG	TCTAGATTAC	ATTTTCATTG	420
ACTTAAATGC	TTTAGAGGTT	GAACAGGTGA	TTCCATTACC	TAGTCATGAA	GAAGTTACCA	480
CTCCACTCGA	G					491

(2) INFORMATION FOR SEQ ID NO:278:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 369 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:278:

GAATTCGGCC	AAAGAGGCCT	ACAGAGAACA	GATAAAAATA	AGCCTGTGGA	ATGACCACTT	60
TGTGGAATAC	GGCAGAACCG	TGTGTATGTT	TCGCACAGAG	AAGATTCGGA	AGCTCGTAGC	120
CATGGGCATC	CCTGAATCTT	TGCGAGGGAG	ACTCTGGCTT	CTCTTCTCAG	ATGCCGTGAC	180
GGATCTTGCC	TCACACCCTG	GTTACTACGG	GAATCTGGTG	GAGGAGTCCC	TGGGGAAATG	240
CTGCCTGGTA	ACCGAGGAGA	TAGAACGAGA	CCTGCACCGC	TCCCTGCCAG	AGCACCCCGC	300
CTTCCAGAAC	GAAACGGGAA	TTGCTGCTTT	GAGGAGAGTC	TTGACGGCCT	ATGCCCCACG	360
GAGCTCGAG						369

(2) INFORMATION FOR SEQ ID NO:279:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 528 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:279:

GAATTCGGCC	AAAGAGGCCT	ACTCTCCCTT	TCCACTCCCT	GGTGTTCCTA	GGAGTGAGAT	60
GAGGGTGGAG	GGGCCCAGCA	CAGCACCTTC	AACCTCAGGA	TGAGAGAGGC	CCTTTCACAA	120
AACTCTAAGG	CAGGGGAACA	GGAAACAGAG	AAAGCCGGAG	AACCCAGGA	GGGCCCCAAG	180
AGCGGATTCT	GCTGATTATT	AATGTGCTTG	CCCAATGAAG	AAAGAATACT	GGCACTCTCT	240
AGGTATGATG	AGAGCAGACA	GCAAACGTGG	GGCCTGTCTA	CAGTGATTCT	CTACCCCAAT	300
GTATGGTCAT	CCACGTTAGA	AGCAGCAGTG	AAAGGCGTGT	TGCTTTTCAT	TATTAACCTC	360
AAATCCCACT	CCCTAAACCA	GCTCTTGACG	CCCCTCTGTC	AGGTGCTAAT	CCTGGAAACT	420
GGAGGCCACC	TGGTCTCCAC	TTTAGGTGAG	GAAAACCTGG	GAGAAGCCAT	CAGACTGCAC	480
CTGTGGCATG	AGATGCTTTG	AGACAGGTCA	AGAGGAGGAG	CTCTCGAG		528

(2) INFORMATION FOR SEQ ID NO:280:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 323 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:280:

GAATTCGGCC AAAGAGGCCT ACAGTGTCCG AGTAGATTG AACTGGAGG TGAAGGTAGG	60
AGTAAGTGAT AGATTTTAGA ATTAGTGCTC AGAGCTGAAA TATCCAGTCC GTGAACTTAG	120
AGGCCAGCCT TCATACCACT GTGATGACAG GAACTACCCT AATCTTTTCT GTCCTTTTCT	180
CTCTGCTGTC CCTCGGGCTG CCAGGCCAGC AGCAACACCC ACAGGTAATC TCCCGCTGA	240
CTCCATCCAC TTGCTCTGCC CTCTGCCCTC TCTGTGCCCC GTTGACCTG AGCGTACACC	300
CCAGCAGTGG CATCCAATC GAG	323

(2) INFORMATION FOR SEQ ID NO:281:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 337 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:281:

GAATTCGGCC AAAGAGGCCT ACTCAGTCAG TACCATGCCA GTTACCTTTT TTCCTTGTA	60
CTTAATGAAT TGGATTTTCC TCAATCTGTT ATTTGTAGGA GGTGTGTATG GGGCCAGGGT	120
AGATTTCCAG ATTTCTGCCT CAGAGGTAGT CTTTTTCACA TATGACACCT GGGTGTGTTT	180
CTCTGTGTGG CCACAAGTCT TCTGCCTCTC TAAAAAATG TCTAGACCTT CTAGAAGGTC	240
TTTTGCCGCT AATTCTGAAC TTTCCACTCC TTCCTTTGCA GCTGTGATTG GAGGGACATG	300
GCTCCAGCAT GCCAATGTAA ACCACGCCCC CCTCGAG	337

(2) INFORMATION FOR SEQ ID NO:282:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 194 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:282:

GAATTCGGCC AAAGAGGCCT AGGCTCTTCC ACTTAATTC ATACTTTCAG GTCTGGATGC	60
CCATTTTAAT TCTTCTGAAA GCATGCCTCC TTCTGGCTTC AGGACTCCAT CTCCAGCCTT	120
ATGATCTAAA AATAATGGAA AATTACCCGG TATCGTTAGA GCTACACCAA AATTGCATTG	180
AGCCAAAAC CGAG	194

(2) INFORMATION FOR SEQ ID NO:283:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 296 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:283:

GAATTCGGCC	AAAGAGGCCT	AAAATCATCA	TATTCATAGA	GATATTAAAA	GTGCAAATAT	60
CTTACTGGAT	GAAGCTTTTA	CTGCTAAAT	ATCTGACTTT	GGCCTTGAC	GGGCTTCTGA	120
GAAGTTTTGC	CCAGACAGTC	ATGACTAGCA	GAATTGTGGG	AACAACAGCT	TATATGGCAC	180
CAGAAGCTTT	GCGTGGAGAA	ATAACACCCA	AATCTGATAT	TTACAGCTTT	GGTGTGTTT	240
TACTAGAAAT	AATAACTGGA	CTTCCAGCTG	TGGATGAACA	CCGTGAACCA	CTCGAG	296

(2) INFORMATION FOR SEQ ID NO:284:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 456 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:284:

GAATTCGGCC	AAAGAGGCCT	AGCAACATCC	ACGCAGCTGC	TCATCAGGTA	CGAGTGCTTC	60
CATATCCATT	TACCCACCAT	TGGCAATTTG	AAAGGACCAT	CCAGACCCCC	ATAGGATCCA	120
CATGGAACAC	CCAGAGGGCT	TTCCAAAAGC	TGACTACTCC	CAAGGTCGTC	ACCAAGCCAG	180
GCCATATCAT	TAACCCCAT	AAAGCAGAAG	ACGTGGGCTA	CCGGTCTTCC	TCAAGGTCGG	240
ACCTGTCTGT	CATACAGAGG	AATCCAAAAC	GAATCACCAC	ACGTCACAAA	AAACAGCTGA	300
AGAAATGCTC	TGTAGATTGA	GTTGCTGGAG	GAGTGACAGC	CAGGAGCCCT	GACTTCACTT	360
CCTTTGGTCC	AGTTTACTC	TGATACAGGG	TGGATTCCAA	AACTGGCTCA	GTACATTGCA	420
TGTAGTTAAG	CCACATTTTA	AAAATAAAGG	CTCGAG			456

(2) INFORMATION FOR SEQ ID NO:285:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 150 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:285:

GAATTCGGCC	AAAGAGGCCT	AAGGTCGGCC	TGTTTCATCTT	GATTAGCATC	CAGGCCTTGG	60
AATATTTTCAT	CAATGACAGC	TTTATCTTTG	ATATTCTTGA	TGGTGTGTTGC	AAGCTCCTTT	120
GTAAGCAGCT	GCTTCAGCTC	ACCCCTCGAG				150

(2) INFORMATION FOR SEQ ID NO:286:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 115 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:286:

AATCCAAGCA ATAACCCAAG CAAAACCTTCA GATGCACCTT ATGATTCTGC AGATGACTGG
TCTGAGCATA TTAGCTCTTC TGGGAAAAAG TACTACTACA ATTGTGCAAC TCGAG

60
115

(2) INFORMATION FOR SEQ ID NO:287:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 278 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:287:

GGAAGAAGAT GCTAGGAGAA GACTCAGATG AAGAAGAGGA AATGGATACC TCTGAAAGGA 60
AGATAAATGC TGGTAGCCAA GATGATGAGA TGGGTTGCAC CTGGGGAATG GGAGAAGATG 120
CAGTAGAGGA TGATGCTGAA GAGAACCCTA TTGTCTTAGA GTTTCAGCAG GAAAGGGAGG 180
CCTTTTATAT AAAGGATCCC AAAAAGGCTC TCCAAGGCTT TTTTGACCGA GAAGGAGAAG 240
AATTAGAATA TGAATTGAT GAACAGGGAC AACTCGAG 278

(2) INFORMATION FOR SEQ ID NO:288:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 364 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:288:

GGATTTCTGA GGCCAAGTGC CCAATAGTTT CCAGTAGAAA CATGGCCATA CCAGTCTAGA 60
ATTTAACCTT CTCATTTAAT CAATAGCACA ATCTAACCTA CACAAGAATA AGCAATCAAA 120
CATCCAGTAT AACATGTTTT TCATTTTTAC TTCTTGCGG TCAATTTTTT TAATGATCTA 180
TTTAAATTT TTTCAAATG ACAACTACTA TGAATACTG AATACAAAGT TCAGTAACAC 240
AACATTGATA ACAACAACAG CAGCAACAAT ACCACAACCA CCACCACTGA ATGGTCTGGG 300
CACCTTCACA ATGGCTGTTG TACTTAGTTA CGAAGAAGAG TGGGGACAGA AAATGAAGCT 360
CGAG

(2) INFORMATION FOR SEQ ID NO:289:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 471 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:289:

GACTCCATGC GTATGTCCCA CCTAAAGGTC GGCTCTGCTG CCGACATCCC CATCAACATC 60
TCAGAGACGG ATCTCAGCCT GCTGACGGCC ACTGTGGTCC CGCCCTCGGG CCGGGAGGAG 120
CCCTGTTTGC TGAAGCGGCT GCGTAATGGC CACGTGGGGA TTTCATTCTG GCCCAAGGAG 180
ACGGGGGAGC ACCTGGTGCA TGTGAAGAAA AATGGCCAGC ACGTGGCCAG CAGCCCCATC 240
CCGGTGGTGA TCAGCCAGTC GGAAATTGGG GATGCCAGTC GTGTTCTGGG CTCTGGTCAG 300
GGCCTTCACG AAGGCCACAC CTTTGAGCCT GCAGAGTTTA TCATTGATAC CCGCGATGCA 360

GGCTATGGTG GGCTCAGCCT GTCCATTGAG GGCCCCAGCA AGGTGGACAT CAACACAGAG 420
 GACCTGGAGG ACGGGACGTG CAGGGTCACC TACTGCCCCA CAGAGCTCGA G 471

(2) INFORMATION FOR SEQ ID NO:290:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 281 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:290:

GAATTCGGCC TTCATGGCCT AGATTGAGTC ACATTGTTCT CTTTGATCCA TTTTCTTTTA 60
 GACAACATCA CTCAAACAAC CCTATTACTT CAGTAGCAAT GAACTGTCTC TGGATTTTAT 120
 TAAGCATCTC ACTTGTTCTT TTTCTTCAGC TGTATGGCAC CCTGTCTTCC TGTACACCAG 180
 AGGCTCCTCA GCTGGGTAAG GTGAGCCAAC GTTACCAGGA GTATATGCTG AGAGGCCATT 240
 TCAAAGTCTT TCATAGAAGG CTGTGCTTGG GCAAACCTCGA G 281

(2) INFORMATION FOR SEQ ID NO:291:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 250 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:291:

GAAACTCTGC CCCTGAAGGT TTGTTTTCTA ATTCAGAGGT TTAAATTAAT CTAGCCCACT 60
 TAATAAAACC AGAGATCCTA TGGGAAATTT AGCCTAAGAC AGTGCTGGAA ATTGCCATAT 120
 GTTGATACAA AGAAGTGTTT GGCCACATTA CAGGTCTCAG ACTCAACTGC TATGTGTGAC 180
 TGCCGCTCTG TGCCTATGTC TTGCTTTTTT GCTGAGTTCC CTATTTCAT ATCTCCAGGT 240
 GATCCTCGAG 250

(2) INFORMATION FOR SEQ ID NO:292:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 264 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:292:

GAAATGTCAG AGGCACATAA GCTTTTACAA AAATTGTTGG TTCATTGTCA GAAACTGAAG 60
 AACACAGAAA TGGTGATCAG TGTCTACTG TCCGTGGCAG AGCTGTACTG GCGATCTTCC 120
 TCCCCTACCA TCGCGCTGCC CATGCTCCTG CAGGCTCTGG CCTCTCCAA GGAGTACCGG 180
 TTACAGTACT TGGCCTCTGA AACAGTGCTG AACTTGGCTT TTGCGCAGCT CATTCTTGGA 240
 ATCCCAAGAAC AGGCCCAACT CGAG 264

(2) INFORMATION FOR SEQ ID NO:293:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 416 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:293:

GAATTCGGCC	CTTCATGGCC	TAGGTTTCTC	CGTGTTGGTC	AGGCTGGTCT	CGAACTCCTG	60
ACCTCAGGTG	ATCCACCTGC	CTCAGCCTCC	CAAAGTGCTG	GGATTACAGG	CATGAGCCAC	120
CATGTCCTGC	TATAAATAAC	TTTAAATAGG	CTCTTTTCT	GGCTTTTTTT	TTTAGTAACT	180
CAGCCCATT	TCTTCTTCTC	AATCTGGTCT	TGTAAATGT	TGATAACGCT	GTCTTACTTT	240
TAAATTGCCG	TGATTAGAAA	TTACTAGAGA	TATATAAACC	TAGTCTTTTG	GGGGATTTTG	300
AAAGGGTCAT	AGTATTCTTA	CTGTCTTTCA	AAATGTACCT	TATATTGAA	CATTGGAAGA	360
TACGTGTTGC	TGAATACAAG	TTAGTTTCAT	ACACACACAT	ACACATGACA	CTCGAG	416

(2) INFORMATION FOR SEQ ID NO:294:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 458 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:294:

GAATTCGGCC	TTCATGGCCT	ACTCCATTCC	CAGATAGAAA	GCTTGAATGA	AGAGTTGGTC	60
CAGCTGCTTC	TCATCCGAGA	TGAGCTGCAC	ACAGAGCAGG	ATGCCATGCT	GGTGGACATT	120
GAAGACTTGA	CCAGACATGC	TGAAAGTCAG	CAGAAGCACA	TGGCAGAGAA	AATGCCTGCA	180
AAGTGAAAAG	AAGCCATTCA	ACCAGAGAAC	AAGCTAGAAT	TTATTTTGCT	TCTGTGGTTG	240
TAAAAATGCT	GTTGCTAAAG	GTGGCGCAGA	AACAAATATC	AGTGTTAGTC	ATTGATAATG	300
TCTGAAGCTT	AATGTCCAGT	GATTGGCCTT	TGCTTCTTAA	TTTATTTTAA	TTTTTACTT	360
GTGCCACTTA	ATATCAGGCA	TTTTAATAAA	ATATTGTTAC	AAAAAATGTA	CAGTACTGAC	420
ACCACCACAA	ATCATGGTTA	ATAAAAGAGA	GTCTCGAG			458

(2) INFORMATION FOR SEQ ID NO:295:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 302 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:295:

GTGTAAAACC	AATGCCAGGA	AAACCAAATA	CACAAAACCC	TCCACGGAGA	GGTCCTCTGA	60
GCCAGAATGG	GTCTTTTGGC	CCATCCCCTG	TGAGTGGTGG	AGAATGCTCC	CCTCCATTGA	120
CAGTGGAGCC	ACCCGTGAGA	CCTCTCTCTG	CTACTCTCAA	TCGAAGAGAT	ATGCCTAGAA	180
GTGAATTTGG	ATCAGTGGAC	GGGCCTCTAC	CTCATCCTCG	ATGGTCAGCT	GAGGCATCTG	240
GGAAACCCTC	TCCTTCTGAT	CCAGGATCTG	GTACAGCTAC	CATGATGAAC	AGCAGTCTCG	300
AG						302

(2) INFORMATION FOR SEQ ID NO:296:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 412 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:296:

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CATGGATCTG CCTCCTGAGA GGGATGGAGA GAAGGGGAGG AGCACAAAGC CTGGCTTTGC      60
CATGCCAAAA CTTGCACTTC CCAAAATGAA GGCTTCTAAG AGTGGGGTCA GCCTGCCACA      120
GAGAGACGTG GATCCTTCCC TTCTAGTGC CACAGCAGGG GGTAGCTTTC AAGACACAGA      180
AAAGGCCAGC AGTGACGGTG GTAGGGGAGG ACTTGGTGCA ACAGCAAGTG CCACAGGAAG      240
TGAGGGTGTG AACCTCCACC GGCCACAGGT CCACATTCCC AGTTTGGGCT TTGCCAAACC      300
TGATCTCAGA TCCTCCAAGG CCAAGGTGGA GGTGAGCCAG CCTGAAGCTG ACCTGCCTCT      360
TCCCAACAT  GATCTGTCTA CCGAAGGTGA CAGCAGAGGA TGTGGGCTCG AG              412

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(2) INFORMATION FOR SEQ ID NO:297:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 308 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:297:

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GTGCTGGTGG CGCGGGGAGT GCGCGTCAAG GTGAACGAGG CCTACCGGTT CCGCGTGGCA      60
CTGCCCTGCGT ACCCAGCGTC GCTCACCGAC GTCTCCCTGG CGCTGAGCGA GCTGCGCCCC      120
AACGACTCAG GTATCTATCG CTGTGAGGTC CAGCACGGCA TCGATGACAG CAGCGACGCT      180
GTGGAGGTCA AGGTCAAAGG GGTCGTCTTT CTCTACCGAG AGGGCTCTGC CCGCTATGCT      240
TTCTCCTTTT CTGGGGCCCA GGAGGCCTGT GCCCGCATTG GAGCCACAT CGCCACCCCA      300
ATCTCGAG                                     308

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(2) INFORMATION FOR SEQ ID NO:298:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 269 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:298:

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GAATAAGTAA ATTCATGGAA AGGAAGAAAT TAAAAGAAAG TGAGGAAAAG GAAGTGCTTC      60
TGAAAACAAA CCTTTCTGGA CGGCAGAGCC CAAGTTTCAA GCTTTCCCTG TCCAGTGGAA      120
CGAAGACTAA CCTCACCAGC CAGTCATCTA CAACAAATCT GCCTGGTTCT CCGGGATCAC      180
CTGGATCCCC AGGATCTCCA GGCTCTCCTG GATCCGTACC TAAAAATACA TCTCAGACGG      240
CAGCTATTAC TACAAAGGGA GGTCTCGAG                                     269

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(2) INFORMATION FOR SEQ ID NO:299:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 458 base pairs

- (B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:299:

GAGCGACCTT	TGGAATAGTT	AAGCACAGGT	CATTGTGGAC	ATGAATTCAG	GCCTCTGTAC	60
TAAAATCTAT	TTCAGGGAAT	GTTCTGTCTA	GTGATTGCT	CACCATTGGA	TATATAATGA	120
ATTATAGGAC	AAGTATAAGC	TGATCTGCTA	TAGCTGTCCA	TCAGAGAGAA	TACACGTGGC	180
TATAACATCT	ATAACAAAAC	GACGATTCCCT	CTACAAGAGG	CTGTTTCTCA	CTGCTAACGT	240
TGGTGTCTTCT	GGCGTGGGAA	GAAATGCACA	GGCGTGCATG	GCATGCACGT	TCAGACAGCT	300
GCATTGTAAG	AGTTCTGTCA	TGCAGTCTGA	AAAGGGAAGA	AACAGGATGG	CTTTCTGTAG	360
CCACACCTGT	GAGGCGTGAT	GATTGTTGTA	TTATTAGATT	ACTGATTTTT	CTTTTCTGAA	420
AATACATTG	AGTTTAAATC	ACATCTGTGG	AACTCGAG			458

(2) INFORMATION FOR SEQ ID NO:300:

- (i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 99 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:300:

GGGATGCCTG	TTCTTGGGGT	AGAGAAGTCA	GGTAGCCCG	GGCCCGCACT	CTCAATAGAC	60
CTTCAGAGAA	AAGGCATCGA	GGTAAATGCC	GCACTCGAG			99

(2) INFORMATION FOR SEQ ID NO:301:

- (i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 569 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:301:

GGTCTAACAG	TAACTACT	CAAGAGACCC	TGGAAATAAT	GAAAGAATCA	GAAAAAAAC	60
TGGTGGAAGA	ATCTGTAAAC	AAAAACAAGT	TTATATCTAA	GACTCCAAGT	AAGGAAGAAA	120
TTGAGAAAGA	ATGTGAAGAT	ACCAAGTTGC	GTGAGGAGAC	ACAGAGGCGG	ACATCTAACC	180
ATGGTCATGC	CAGGAAAAGA	GCCAAGTCTA	ATTCCAAGCT	AAAGTTGGTG	CGTAGCCTGG	240
CAGTGTGTGA	GGAGTCCTCC	ACCCCATTTG	CTGATGGGCC	ATTAGAAACC	CAGGATATAA	300
TTCAATTGCA	CATCAGTTGC	CCTTCTGACA	AGGAGGAAGA	AAAGTCCACA	AAAGATGTCT	360
CTGAAAAGGA	AGACAAGGAC	AAAAACAAAG	AAAAGATCCC	AAGGAAGATG	CTGTCCAGAG	420
ACTCCAGCCA	GGAATATACG	GACTCCACTG	GAATAGACCT	ACATGAATTT	CTTGTAATAA	480
CACTGAAAAA	GAACCCAAGG	GACAGAATGA	TGCTGCTAAA	ATTAGAACAG	GAGATTCTGG	540
AATTTATTAA	TGACAACAAC	CCACTCGAG				569

(2) INFORMATION FOR SEQ ID NO:302:

- (i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 311 base pairs

- (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:302:

GCGATTGAAT TCTAGACCTG CCACCCAAAC CCCAACTCTC AGACTTACCT CCCAAACCAC	60
AGATGAAGGA CCTGCCCCCC AAACCACAGC TGGGAGACCT GCTAGCAAAA TCCCAGACTG	120
GAGATGTCTC ACCCAAGGCT CAGCAACCCT CTGAGGTCAC ACTGAAGTCA CACCCATTGG	180
ATCTATCCCC AAATGTGCAG TCCAGAGACG CCATCCAAAA GCAAGCATCT GAAGACTCCA	240
ACGACCTCAC GCCTACTCTG CCAGAGACGC CCGTACCACT GCCCAGAAAA ATCAATACGG	300
GGGCACTCGA G	311

(2) INFORMATION FOR SEQ ID NO:303:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 683 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:303:

ACAGCATGAA GGCAGAAGCC AATGCCCTGC ATCACAACA CGACAAGAGG AAGCGTCCGG	60
GGAAGAATGC ACCCCAGGA GGTGATGAGC CACTGGCAGA GACAGAGAGT GAAAGCGAGG	120
CAGAGCTGGC TGGCTTCTCC CCAGTGGTGG ATGTGAAGAA AACAGCATTG GCCTTGGCCA	180
TTACAGACTC AGAGCTGTCA GATGAGGAGG CTTCTATCTT GGAGAGTGGT GGCTTCTCCG	240
TATCCCGGGC CACAACCTCC CAGCTGACTG ATGTCTCCGA GGATTTGGAC CAGCAGAGCC	300
TGCCAAGTGA ACCAGAGGAG ACCTAAGCCG GGACCTAGGG GAGGGAGAGG AGGGAGAGCT	360
GGCCCCCTCC CGAAGACCTA CTAGGCCGTC CTCAAGCTCT GTCAAGGCAA GCCCTGGACT	420
CGGAGGAAGA GGAAGAGGAT GTGGCAGCTA AGGAAACCTT GTTGC GGCTC TCATCCCCCC	480
TCCACTTTGT GAACACGCAC TTCAATGGGG CAGGGTCCCC CCCAGATGGA GTGAAATGCT	540
CCCCTGGAGG ACCAGTGGAG ACACTGAGCC CCGAGACAGT GAGTGGTGGC CTCAGTCTC	600
TGCCCCGGCAC CCTGTACCT CCACTTTGCC TTGTGGAAG TGACCCAGCC CCCTCCCCCTT	660
CCATTCTCCC ACCTGATCTC GAG	683

(2) INFORMATION FOR SEQ ID NO:304:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 653 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:304:

GAATTCGGCC AAAGAGGCCT AGAGATGTCT ACTCTCAGCT CACGCCTGTA ATCCCAGCAT	60
TGTGGGGAGG TCAAGTTGGG TGGATTGCTT GAGCCCAGGA GTTTGAGACC AGCCTAAGCA	120
ATAGGCAAAA CCTGTCTCT ACAAAAATCA GCCAGGTATG GTAGTGTGTA CCTGTAGTCC	180
TAGCTACTCA GGAGGCTGAG GTGGGAGGAT CGCTTGAGCC TGGGAGGTGA AGGCTGAAAT	240
TAGCCATGAT CATGCCACTG CACCCCAAGC CTGGGCAACA GAGCAAGACC TTGTCTCAAA	300
AAAAAAGGA TGAGCTAGGT TTGTATCTGT AGACAGAGAT TTATGATTAA TTGGTAGGTG	360
AAAAAGTGTA TTAAAGTACA GTTATAGATT AGAGTACAAA ATGAATGAGT ATATATGCGT	420

TTAAAAGTAT GTATACATAT CAGGAAAGGT TACATGAGGA TTTTCACTTT CCACTTTATA	480
TCTCCCAGTA TTTGAATTTT TAATAACAAT CTTTTTATCA TAAAACTATA TTAAATTAAA	540
CTTTTAGATT TTTTAGTGGT ATAAGTAGAA CAGGAACCCT AATACATTGT TTTCTACTTT	600
TGTGATAAAG ATAATTCATG ATAGATGAAG TTGCAAACCG AAAGATCCTC GAG	653

(2) INFORMATION FOR SEQ ID NO:305:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 442 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:305:

GAATTCGGCC TTCATGGCCT AAGGTATTCC AAAATGTCTA ATTTATTTTA TCCGATGGTA	60
AATGTAATAA TTAAAGAAAG AGGAAAGAAT CATGAAAGGT GGCCCTTAAA GAGGGCTTCT	120
GGCAGAGTTA GGTCAGAGGC ACACTTTCTT ACAGACTAAG AGTTTTTAAG TACTCAAGGT	180
GATGTTTATC AGAAGCTTGG ACTGCTTCTG TGTCTTTTAA TTGTGCTTAT CTGGGAGGGA	240
GAGTTCTGTG TCTGCTCCTA TACATCTTTC TGCAGCTGCA GACATACTCC CTGAGTCTGC	300
TTTTAGCTTT CCTATCTTAG TGCACCTGAA GGGAAAGGAA TGAGCTTATT AAGGCCCACT	360
GTTTTACTGG GGCCCATTTG ATGAGAGTGA AGTTTGGCAG TTACCCAAGA GACGTTCCCC	420
TCACCTCCCT CCGGCGCTCG AG	442

(2) INFORMATION FOR SEQ ID NO:306:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 412 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:306:

GAATTCGGCC TTCATGGCCT ACCAATATGC AAATCAGTAC CTCTTCTCTT AGAGGTGTTC	60
ATGCCCAAGC TCCTCAGACA AGTCCATCCC ACTGTGTGGG AGGAAGTTGA AGGGTGAGGA	120
TTTTTAAGAT TTTTATCTTG CTGAAGTTG TGAAGACTCA ATGACAAATG GCTAGGTTTT	180
GAAGGGGTCT TGGAAGTCAT TACTGGGGAT AGACCCCTCT TGATACTTGT CACATTAATA	240
TCTGCCCAGA CTCTCACACA TTCAGATGTT TAACGTCACA TGCATTAAGT TCTTTTGGTT	300
GCATGAGACA GTGATGCACA GAAACTCACT TAGGAAAGGA GATAGGTGGC AATAAAGAAA	360
ACAGGGATT CATAGGAATG CAGTAAAAAA AAAACCATGG CCTAATCTCG AG	412

(2) INFORMATION FOR SEQ ID NO:307:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 239 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:307:

GGGGTTGTCT GAGGCCCAAG GGTGCTATAA GGGCCGCTCT ACGGTGTCCT GGGGCCCGGG	60
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CTTGGCCCTT GTTGCAGAAG GTTGAGGAG CCGGGCTGGG CCCTGCGCAC CTCCCGGGGC	120
AGCTCGCCCT GCTTGGCCAG CTTCTCCCAT AGCTGCTCCT TCCGCCTGAG CTTCTTGGCG	180
TTGGGGACCT GGTGGGCGAG GACGTCTTTG GGGGCAGGA CTTTGGATGT GTTCTCGAG	239

(2) INFORMATION FOR SEQ ID NO:308:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 533 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:308:

GCGCACCATC CTGGGAAGTG CATGTCTCAG ACCAACTCCA CCTTCACCTT CACCACCTGT	60
CGCATCCTGC ATCCTTCAGA TGAGCTCACT CGGGTCACAC CAAGCCTTAA CTCAGCCCCA	120
ACTCCAGCTT GTGGCAGCAC CAGCCACTTG AAATCCACGC CGGTGGCCAC ACCATGCACT	180
CCACGGAGAC TGAGCCTGGC TGAGTCCTTC ACTAACACCC GTGAGTCCAC GACCACCATG	240
AGCACATCCC TGGGGCTCGT GTGGCTGTTG AAGGAGCGGG GCATTTCTGC TGCCGTGTAC	300
GACCCCCAGA GCTGGGACAG GGCCGGCCGG GGCTCCCTCC TGCACCTCTA CACGCCCCAAG	360
ATGGCTGTGA TCCCCTCTAC TCCGCCGAAC TCGCCTATGC AGACACCCAC ATCCTCCCCA	420
CCCTCCTTTG AGTTCAAGTG CACGAGCCCT CCCTACGACA ATTTCTGGC TTCCAAGCCA	480
GCCAGCTCCA TCCTGAGGGA AGTGAGAGAA AAGAAGTCC GCAGGACCTC GAG	533

(2) INFORMATION FOR SEQ ID NO:309:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 297 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:309:

GAATTCGGCC AAAGAGGCCT ACCCTAAAAC ATTTATTTCA AGGAGAAAAG AAAAAGGGGG	60
GGCGCAAAAA TGGCTGGGGC AATTATAGAA AACATGAGCA CCAAGAAGCT GTGCATTGTT	120
GGTGGGATTC TGCTCGTGTT CCAAATCATC GCCTTTCTGG TGGGAGGCTT GATTGCTCCA	180
GGGCCCACAA CGGCAGTGTC CTACATGTCG GTGAAATGTG TGGATGCCCC TAAGAACCAT	240
CACAAGACAA AATGGTTCGT GCCTGGGGA CCAATCATT GTGGCAAGAT CCTCGAG	297

(2) INFORMATION FOR SEQ ID NO:310:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 248 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:310:

GAATTCGGCC AAAGAGGCCT AGGGTTTAAAG AGCTGTGGAG GACTGAAAAC TGGATAAAAA	60
GGGGTTCCTT TTCCTTGCCC CTGTCTCTCA CTCAGATGCG CTTCTTTTTC GCCACTGTTT	120
GGCAAAGTTT TCTGTTAAGC CCCAGTTCT CCAGGTGCGT TACTATTCT GGGATCATGG	180

GGTCAGTTTT AGGACACTTG AACACTTCTT TTCCCCCTC CCCAGTTCTC CAGGTGCGTT
ACCTCGAG

240
248

(2) INFORMATION FOR SEQ ID NO:311:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 343 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:311:

GAATTCGGCC AAAGAGGCCT AGGTAAATAA CTAATATTGA TGTATTTTGA TATTTTAATA	60
TAGACTAGTA AACTATGCAG AGTTAAGTGT TACATTAGAA TCTTGAACCTC TCCTAACATT	120
TCTCTTCCTC AGTTTCCTAT TGTTTTGGTA GAGTATGTAG ACATTGCGGA GATTAATTTA	180
GAGTTGGTAG ATACATTCTG GATTTTCATT TACTTTAGAT AGCAGGTTTG GCACTTTAAA	240
TATATTTAAT TCAGTAAGAG AATAACTGAG TATGAGCTGT ATCCTCATCT TACTGTTGAA	300
GACATCCCAA ATAGTTGGGT GTGCACTGTG GCGGGATCTC GAG	343

(2) INFORMATION FOR SEQ ID NO:312:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 268 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:312:

GAATTCGGCC AAAGAGGCCT ACGGGGAGGC GCGCCCGCGC TGAGTCGGCG GCGGGTAGCC	60
ACTCCATGCC CTTGTCCGAT GGTTTGCAAC TCCGATTTTG CACACCGCTC CACCGTGCCC	120
CCCAGCGCAC ACCCATTCAC ACTCAGCCA AACTCTCGC TGAACACTTT TATAATTGTT	180
AGGCGTGGCC GTTGGGACTT TGGGCGCAGC GCGGCTGATA CTGCGTCTGG AGGATTGATA	240
TTTACTTTTG CATTGCGGTT ACCTCGAG	268

(2) INFORMATION FOR SEQ ID NO:313:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 354 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:313:

GTCTCTCGCC GCCGAGGAA GATGANGCTG AAGATTGGAT TCATCTTACG CAGTTTGCTG	60
GTGGTGGGAA GCTTCCTGGG GCTAGTGGTC CTCTGGTCTT CCCTGACCCC GCGGCCGGAC	120
GACCCAAGCC CGCTGAGCAG GATGAGGGAA GACAGAGATG TCAATGACCC CATGCCAAC	180
CGAGGCGGCA ATGGA TAGC TCCTGGGGAG GACAGATTCA AACCTGTGGT ACCATGGCCT	240
CATGTTGAAG GAGTAGAAGT GGA CT TAGAG TCTATTAGAA GAATAAACAA GGCCAAAAAT	300
GAACAAGAGC ACCATGCTGG AGGAGATTCC CAGAAAGATA TCATACTTCT CGAG	354

(2) INFORMATION FOR SEQ ID NO:314:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 514 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:314:

GAATTCGGCC	AAAGAGGCCT	AGTGCAAGAA	CATGAAGCAC	CTGTGGTTTT	TCCTCCTGCT	60
GGTGGCAGCT	CCCAGATGTG	TCCTGTCCCA	GGTGCACCTG	CAGGAATCGG	GCCCGGGACT	120
GTTGAAACCT	TCGGACACCC	TGTCCCTCAC	CTGCTTTGTC	TCGGGTACT	CCCTCAGTAG	180
TGTTCACTAT	TGGGGCTGGA	TCCGCCAGTC	CCCAGGGAAA	GGACTGGAGT	GGATTGGGAA	240
CATCCATCAC	AATGGTAGAA	CCAATTACAA	CCCGTCCCTC	GCCAGCCGCG	GTTCCATCTC	300
AGCCGACACG	TCCAAGAACT	CCTCTCCCT	GAATCTGACC	TCTGTGACCG	CCGCAGACTC	360
GGCCGTCTAT	TTCTGTGCGA	GCGGCCCTAT	TGCCTCCTTT	GAATCGACGA	CTCTAAAGGT	420
GGGCGGAGAC	TTTCACTCCT	GGGGCCAGGG	AATCCTGGTC	ACCGTCTCCT	CAGCATCCCC	480
GACCAGCCCC	AAGGTCTTCC	CGCACAGCCT	CGAG			514

(2) INFORMATION FOR SEQ ID NO:315:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 215 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:315:

GAATTCGGCC	AAAGAGGCCT	AGGACACTAG	AATTATTAGT	GTTTCATTTTC	ATCTAAGATC	60
TTTATTCTCT	AACGTTCTTG	GTCCTATTGA	AACATTGCAG	TATGCAAAC	TACTGCAATG	120
TTAAACCCAA	GAGAAAAGCC	ATTATCATGT	GTATGCTGGT	CATCATGATC	AGTGTGGTAC	180
AATTTTAAA	AATAAACTAT	CATGCCCTTC	TCGAG			215

(2) INFORMATION FOR SEQ ID NO:316:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 788 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:316:

GAATTATGTA	CGCCCTCTTC	CTCCTGGCCA	GCCTCCTGGG	CGCGGCTCTA	GCCGGCCCGG	60
TCCTTGGACT	GAAAGAATGC	ACCAGGGGCT	CGGCAGTGTG	GTGCCAGAAT	GTGAAGACGG	120
CGTCCGACTG	CGGGGCAGTG	AAGCACTGCC	TGCAGACCGT	TTGGAACAAG	CCAACAGTGA	180
AATCCCTTCC	CTGCGACATA	TGCAAAGACG	TTGTCACCGC	AGCTGGTGAT	ATGCTGAAGG	240
ACAATGCCAC	TGAGGAGGAG	ATCCTTGTTT	ACTTGGAGAA	GACCTGTGAC	TGGCTTCCGA	300
AACCGAACAT	GTCTGCTTCA	TGCAAGGAGA	TAGTGGACTC	CTACCTCCCT	GTCTCCTGG	360
ACATCATTAA	AGGAGAAATG	AGCCGTCTCTG	GGGAGGTGTG	CTCTGCTCTC	AACCTCTGCG	420
AGTCTCTCCA	GAAGCACCTA	GCAGAGCTGA	ATCACCAGAA	GCAGCTGGAG	TCCAATAAGA	480

TCCCAGAGCT	GGACATGACT	GAGGTGGTGG	CCCCCTTCAT	GGCCAACATC	CCTCTCCTCC	540
TCTACCCCTCA	GGACGGCCCC	CGCAGCAAGC	CCCAGCCAAA	GGATAATGGG	GACGTTTGCC	600
AGGACTGCAT	TCAGATGGTG	ACTGACATCC	AGACTGCTGT	ACGGACCAAC	TCCACCTTTG	660
TCCAGGCCTT	GGTGGAAACAT	GTCAAGGAGG	AGTGTGACCG	CCTGGGCCCT	GGCATGGCCG	720
ACATATGCAA	GAACATATATC	AGCCAGTATT	CTGAAATTGC	TATCCAGATG	ATGATGCACA	780
TGCTCGAG						788

(2) INFORMATION FOR SEQ ID NO:317:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 214 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:317:

GAATTCGGCC	AAAGAGGCCT	AAATCATCCT	GATGATGGTT	TTCTTACATA	AACATGAGCT	60
TCTGACCATG	TACCATGGAT	GGGTTCTCAC	TTCCTGCTAT	ATCCTGATCA	TCACTATTGC	120
AAATATTGCA	AATTTGGCCA	GTAAGTCTAC	TGCAATCACA	ATCCAAAGGG	ATTGATTGT	180
TGTTGTTGCA	GGAGAAGACA	GAAGCAAAC	CGAG			214

(2) INFORMATION FOR SEQ ID NO:318:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 267 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:318:

GTTGTCTTTT	TTCCCCTTTA	TAGCTGCTGG	AGTGAATTTT	AGAAAGCCTA	AGTCATACAT	60
CACATTGCTT	CATGGGCATC	CCAGTACACT	TTGGATTTTA	TTTTACATCC	TTACTGATCT	120
GATTCTCATC	TCTGTCTCTT	CATGGTTCTC	TGCCTTCTAG	TTACACTGGT	GACCTTTCAA	180
AACCTTTACC	ACATTGAGTT	CATTCTTAC	TTTTCACTCT	TTCTCTGCCT	GGAGTGTTC	240
GCCCCATCTT	TACGTGGCAC	GCTCGAG				267

(2) INFORMATION FOR SEQ ID NO:319:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 256 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:319:

GAAGCTTTCA	GGCTATCTTC	TAGTCAAGAT	GAGTGATAAG	CCAGACTTGT	CGGAAGTGGA	60
GAAGTTTGAC	AGGTCAAAAC	TGAAGAAAAC	TAATACTGAA	GAAAAAAAT	ACTCTCCCT	120
CAAAGGAAAC	TATCCAGCAA	GAGAAAGAGT	GTGTTCAAAC	ATCATAAAT	GGGGATCGCC	180
TCCCAACAGC	AGATTTGAC	ATTACCTGAG	AGTCTTGATT	TTAGGCTTGT	TTTTTGTA	240
CCCATGTGTT	CTCGAG					256

(2) INFORMATION FOR SEQ ID NO:320:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 304 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:320:

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GCTGCGTGTG ATGGAGACCA AACCCGACAA GGCAGTGTCC ATCATTGAGT GTGACATGAA      60
CGTGGACTTT GATGCTCCCC TGGGCTACAA AGAACCCGAA AGACAAGTCC AGCATGAGGA      120
GTCGACAGAA GGTGAAGCCG ACCACAGTGG CTATGCTGGA GAGCTGGGCT TCCGCGCTTT      180
CTCTGGATCT GGCAATAGAC TGGATGGAAA GAAGAAAGGG GTAGAGCCCA GCCCCTCCCC      240
AATCAAGCCT GGAGATATTA AAAGAGGAAT TCCCAATTAT GAATTTAAAC TTGGCGCGCT      300
CGAG                                         304

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(2) INFORMATION FOR SEQ ID NO:321:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 298 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:321:

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GAATTCGGCC AAAGAGGCCT ACTCTTACAC CTTCCGCTCC GTGGGCACCT TCAATATCAT      60
CGTCACGGCT GAGAACGAGG TGGGCTCCGC CCAGGACAGC ATCTTCGTCT ATGTCCTGCA      120
GCTCATAGAG GGGCTGCAGG TGGTGGGCGG TGGCCGTAC TTCCCCACCA ACCACACGGT      180
ACAGCTGCAG GCCGTGGTTA GGGATGGCAC CAACGTCTCC TACAGCTGGA CTGCCTGGAG      240
GGACAGGGGC CCGGCCCTGG CCGGCAGCGG CAAAGGCTTC TCGCTCACCG TGCTCGAG      298

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(2) INFORMATION FOR SEQ ID NO:322:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 320 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:322:

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GCGCCGTGTC CTTTTGCGTT GGTACCAGCG GCGACATGAC GGGGTACACT CCGGATGAGA      60
AACTGCGGCT GCAGCAGCTG CGAGAGCTGA GAAGGCGATG GCTGAAGGAC CAGGAGCTGA      120
GCCCTCGGGA GCCGGTGCTG CCCCCACAGA AGATGGGGCC TATGGAGAAA TTCTGGAATA      180
AATTTTGGGA GAATAAATCC CCTTGGAGGA AAATGGTCCA TGGGGTATAC AAAAAGAGTA      240
TCTTTGTTT CACTCATGTA CTTGTACCTG TCTGGATTAT TCATTATTAC ATGAAGTATC      300
ATGTTTCTGA AAAACTCGAG                                         320

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(2) INFORMATION FOR SEQ ID NO:323:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 307 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:323:

GCAAAAATCT CAGGCCCCAG AAAAGCCTCT TGTCATCTCT CAGATGGGTT CCAAAAAGAA	60
GCCCCAAATT ATCCAGCAAA ACAAAAAAGA GACCTCGCCT CAAGTGAAGG GAGAGGAGAT	120
GCCGGCAGGA AAAGACCAGG AGGCCAGCAG GGGCTCTGTT CCTTCAGGTT CCAAGATGGA	180
CAGGAGGGCG CCAGTACCTC GCACCAAGGC CAGTGAACA GAGACAATA AGAAAGGAAC	240
CAAGGAAAGG ACAAATGGTG ATATTGTTCC AGAACGAGGG GACATCGAGC ATAAGAAGGA	300
ACTCGAG	307

(2) INFORMATION FOR SEQ ID NO:324:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 299 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:324:

GCACTTCTGA GAGGATGCTG GGAATCTGCA GGGGAGACG GAAATTCTTG GCTGCCTCGT	60
TGAGTCTTCT CTGCATCCCA GCCATCACCT GGATTACCT GTTTCTGGG AGCTTCGAAG	120
ATGGAAAGCC CGTGTCTCTG TCACCGCTGG AGTCCAGGC ACACAGCCCC AGGTACACGG	180
CCTCCAGCCA GCGGGAGCGC GAGAGCCTGG AGGTGCGCAT GCGCGAGGTG GAGGAGGAGA	240
ACCGCGCCTT CCGCAGGCAG CTCAGCCTGG CCCAGGGCCG AGCCCCACCC ATCCTCGAG	299

(2) INFORMATION FOR SEQ ID NO:325:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 292 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:325:

GAATTCGGCC TTCATGGCCT ACTCCAAACT CATGCCCTTG TTTTATCTC TGCCCTTGGA	60
TGGCTGTCTT CTATTTTCAC TCACAATTTT AACACATTTT GACTTGCTCG TGTCACCTAG	120
GGTTTCGCCC TCAGGTATGT CTTCTTCCTT AATTCTTTG CCGTCTTTGG TGCTGTTGAC	180
CTCACCCTTT CTGGGGTCTT CCTATTGGTC TCAGCTTCAG GTTTGCAGCC GCCCTGGTT	240
TCCTGAACAT TCCTTCTGTG GGGTCTTCCC CTCCTTCTCA CCCACCCTCG AG	292

(2) INFORMATION FOR SEQ ID NO:326:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 345 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:326:

GAATTCGGCC TTCAGACTTG AAGTGGAGAA GGCTACGATT TTTTGATGT CATTGTGT	60
AAGGGCGCAG ACTGCTGCGA ACAGAGTGGT GATAGCGCCT AAGCATAGTG TTAGAGTTTG	120
GATTAGTGGG CTATTTTCTG CTAGGGGGTG GAAGCGGATG AGTAAGAAGA TTCCTGCTAC	180
AACTATAGTG CTTGAGTGA GTAGGGCTGA GACTGGGGTG GGGCCTTCTA TGGCTGAGGG	240
GAGTCAGGGG TGGAGACCTA ATTGGGCTGA TTTGCTGCT GCTGCTAGGA GGAGGCCTAG	300
TAGTGGGGTG AGGCTTGAT TAGCGTTTAG AAGGGCAAAC TCGAG	345

(2) INFORMATION FOR SEQ ID NO:327:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 474 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:327:

GAATTCGGCC TTCATGNCCT ACCTTTCCGT CCGTTCTTC ACGCCTTCCT CCTCATTTC	60
CTTCCTTCTA TTTTCCCTTC CCTCTTCCG CTTTCCTGCC CCGTTTCCTT CCTCCCTCCC	120
TTCCTCCTTC CTTCTTCCCT CTGCGTTCTT CCTCTCTCCT TTGTTCCCTC CTCCTCCTCC	180
CCACTCCCTT TTCCTCTCCT CTTCCCACCC CAGTCTCCTA CTCCTCCAGTC CTCCTATCCC	240
CATGGAACAT ACACCTGCTT TGTCTGGGAG CCACGTTATT CCTGCCAGCC AGACCCTGGC	300
CAGGAGGATC AGGGTCACGG TCAGCTTGGG CCGAGAACCC TTCACATGAG ACAAGCTCCT	360
CTGCCAGGGT TTCTGTGGG AAAGGCCCA CTCCCAGCC CTCCTGGGCC ACTGCATGGG	420
GTCCCTCTT CGGCTTCTT TCCCTCTCC ACCCGGCAGC CCCCCAGCT CGAG	474

(2) INFORMATION FOR SEQ ID NO:328:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 556 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:328:

GAATTCGGCC AAAGAGGCCT AATTACTCC CCAATATAAA ACATTTTACC TGCGATCTAT	60
GTGTACATAT TGAATGATGT GTAACAATAT CATAATTTT ATGTTCTGCA TTTTTCCTACT	120
TATATATCTT TATTTAAATG GACTTAACTT TACTAATGGA GTAATTTTGA GCTTTCAGAA	180
GGAGTTCTCA CTCGAAGATA AAGAACAGCT CGCTAACCC GAAAGAGGAA TCGATGCTCA	240
GCTTTTAGTT GCACTTCCTA AAGTTGCAGA ATTAAGACAA ATCTTTGAAC CAAAGAAGAA	300
AGAATTTCTTA GAAATGAAAA GAAAAGAAAG AATTGCCAGG CGCCTGGAAG GGATTGAAAA	360
TGACACTCAG CCCATCCTCT TGCAGAGCTG CACAGGATTG GTGACTCACC GCCTGCTGGA	420
GGAAGACACC CCTCGATACA TGAGAGCCAG CGACCCTGCC AGCCCCACA TCGGCCGATC	480
AAATGAAGAG GAGGAAACTT CTGATTCTT TCTAGAAAAG CAACTCGAT CCAAATACTG	540
CACAGAAACC CTCGAG	556

(2) INFORMATION FOR SEQ ID NO:329:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 385 base pairs

(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:329:

GAATTCGGCC	AAAGAGGCCT	ACAAAACCAT	CCATAAATAA	ACAAAGCTAA	GAAAGCTAAG	60
AAACAAAGCT	AAGAAACAAA	GACTGAGGTG	AGGGAGATTT	GAGTATTTTT	TTTTCCTCTA	120
CCAACAAGTG	AAGAATTGAA	CACCTTAATC	CATCTGATCT	CCCAGGTGGA	AGCCACAAAT	180
CTTTTTTTTT	GTTTTGCTCA	GCATATTGGC	ACAGTGAGAA	ATTCATTTTA	TACTCTCTGG	240
CATCTCTCTT	GTAAACTCAC	CAAGTCTCAA	TAAGTTCACA	AAGAAGGCAG	AGACAAATAA	300
CCCTAGAATG	CAGGTGATTG	TTTATTTATG	TATTTTCCTT	GTTACATACC	CACCTATACC	360
CAAGGCCTTT	GCAGAAAAGC	TCGAG				385

(2) INFORMATION FOR SEQ ID NO:330:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 696 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:330:

GAATTCGGCC	AAAGAGGCCT	AGGAAGCAGG	AGTTTATTTT	TATCCTTTTG	TAAGTATTAA	60
CTCGGTAATC	ACAACAAACA	CGGAGCAATC	TCAATGCTGT	TTATCCGGAG	GACAGTCTGC	120
GGGGTCGTGA	CGATTCTTTT	CTTCTTGAAG	TTTTTCCTTT	TCCTGAATCT	CATAATGATT	180
CTTGCCCATG	ATTCTGTCTT	TTCAATGACT	GTGGCTTCTA	CTCGAACAAG	ATCCTTTCCG	240
AGGAGTGGCT	TGCCAAGCAG	CGTGAAGTTG	TCTGCCCCAA	CCAGCAGGAC	CTTCTCCAGT	300
CGAATTCTCT	CTCCACACGC	AAGGTCTAGT	TCATTTCCAA	TTAAGATCAG	GTCTTCAGAG	360
GTCACCTTCC	ACTGGCGGCT	GGCAAAGTGC	ACCACGGCAA	AGAGCCTGCC	ATACTGCCCC	420
GTGACGATCA	TCTCATTCAC	TTTCTTCACG	ACCTCTGCAT	GGTGTCTGGT	CTCCTCAACT	480
GGGTCTGGCA	GAACAACTTC	TGGCCAAGGT	GGTGAACTCA	GGGATGTTTT	AGGAACATAT	540
CCTGGTAGAT	ATGAAGTGCT	CTGTGAATTG	AACCTTCGAG	AAGCAGACCA	AAGGGAGGCT	600
GCTCCGGGCC	CCGAAGGTCT	CAGGATGCTG	TGGCTGCACG	CGGACGCCAG	CCGCCCTAAG	660
GTGACCGTCA	GGGAAGATGC	TGCCATGGCC	GCCGCC			696

(2) INFORMATION FOR SEQ ID NO:331:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 378 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:331:

GAATTCGGCC	AAAGAGGCCT	AATTTTTTGT	ACATCTGGGC	CCTTAGTTTT	TATTCTGTTT	60
ATTATATGTC	TCTGTCTCTC	TCTATTGTGT	GTGTGTGTGT	GTGTGTGTGT	GTGTGTGTGT	120
GTGTGTGTGT	GTGGTGCAGG	AGTGCCACCC	CCAGGGCCCT	GTCAACCTCT	CTTTTCTCCT	180
CCATGGCTGT	CTGCCTGCGT	ATCTGTCTCT	GAGAATCCTC	GGGGCGGTCA	GGGGATGTCA	240
GGAGGGGAAG	GAGCCGCCCT	CCCTATCTTG	CTGCTCCTCT	TGGCACTCAG	GGGCACCTTC	300
CATGGAGCCA	GACCGGGTGG	AGGGGCTTCT	GGGATTGGGT	GTCTGCTGCT	GCCAGAGCAG	360

GAACCCCCAG TACTCGAG

(2) INFORMATION FOR SEQ ID NO:332:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 394 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:332:

GAATTCGGCC	TTCATGGCCT	ACATTGGGAT	TATTGGTGCT	GTGACCATGG	CTGGCATCAT	60
GGCGGCAGAC	AGAAGTGAAT	CACCTAGTTT	GACCCAAGAG	AGAGCCAACC	TGAGCGATGA	120
GCAGTGCACA	CAGGTGACCT	CCTTGTTGCA	GTTGGTTCAT	TCCTGCAGTG	AGCAGTCTCC	180
TCAGGCCTCT	GCACTTTACT	ATGATGAATT	TGCCAACCTG	ATCCAACATG	AAAAGCTGGA	240
TCCAAAAGCC	CTGGAATGGG	TTGGGCATAC	CATCTGTAAT	GATTTCCAGG	ATGCCTTCGT	300
AGTGGACTCC	TGTGTTGTTT	CGGAAGGTGA	CTTCCATTT	CCTGTGAAAG	CACTGTACGG	360
ACTGGAAGAA	TACGACACTC	AGGATGGACT	CGAG			394

(2) INFORMATION FOR SEQ ID NO:333:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 547 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:333:

GAATTCGGCC	AAAGAGGCCT	ACTTATTTTC	CTGTGAAAAT	GCCTACCACA	AAGAAGACAT	60
TGATGTTCTT	ATCAAGCTTT	TTCACCAGCC	TTGGGTCCTT	CATTGTAATT	TGCTCTATTC	120
TTGGGACACA	AGCATGGATC	ACCAGTACAA	TTGCTGTTAG	AGACTCTGCT	TCAAATGGGA	180
GCATTTTCAT	CACTTACGGA	CTTTTTCGTG	GGGAGAGTAG	TGAAGAATTG	AGTCACGGAC	240
TTGCAGAACC	AAAGAAAAAG	TTTGCACTTT	TAGAGATACT	GAATAATTCT	TCCCAAAAAA	300
ACTCTGCATT	CGGTGACTAT	CCTGTTTCCTG	GTCTTGAGTT	TGATCACGTC	GCTGCTGAGC	360
TCTGGGTTTA	CCTTCTACAA	CAGCATCAGC	AACCCTTACC	AGACATTCTT	GGGGCCGACG	420
GGGGTGTA	CCTGGAACGG	GCTCGGTGCA	TCCTTCGTTT	TTGTGACCAT	GATACTGTTT	480
GTGGCGAACA	CGCAGTCCAA	CCAACCTCTC	GAAGAGTTGT	TCCAAATGCT	TTACCCGACT	540
CCTCGAG						547

(2) INFORMATION FOR SEQ ID NO:334:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 397 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:334:

GAATTCGGCC	TTCATGGCCT	AGGGGAAATT	GAGTCAAGAA	AAGGTTCAAT	ATTTTTTAAT	60
GGTAGAATTG	ACCGTATGTG	TATGTGCTTC	TAGAAGTGAT	TCAGGAGAGA	GGGTGGAATG	120

GATGGTGTGG	GACGGAGGGA	AGAATTGGTG	GAATGATGTT	GGCAAAAAGG	AATAGGCTTT	180
TGTGCATAAG	TTGAGGGATT	GGCCTTGCCT	AGAAACATGG	ACAATTCGTC	TATAGTAAGA	240
AGAGAAAAGG	TAGATCTATG	ACCACAGACA	TAGTCAGATA	ATCATTTTAA	AATTCTTTAA	300
TCAATAGATG	TTTCTGATGT	ATGGCAGGCA	GTAAGCTAAG	CAGTTTACAT	ACCTGATTTC	360
ATTTAGTTAT	TATAACAATC	CCAGTCTAAA	ACTCGAG			397

(2) INFORMATION FOR SEQ ID NO:335:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 313 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:335:

GAATTCGGCC	TTCATGGCCT	ACTCCATCCT	TAAGGTCACC	ATTGGTATGT	TCCTGCTCTC	60
TGGAGATCCC	TGCTTCAAGA	CGCCACCATC	GACTGCCAAG	TCCATCTCCA	TCCCAGGCCA	120
GGATTCCTCC	CTGCAGCTGA	CGTGTAAGGG	TGGTGGGACC	AGCAGTGGGG	GCAGCAGCAC	180
CAACTCCCTG	ACTGGGTCCC	GGCCCCCAA	GGCTCGGCCC	ACTATTCTCA	GCTCAGGGCT	240
GCCAGAGGAA	CCCGACCAGA	ACCTGTCCAG	CCCTGAGGAG	GTGTTCCACT	CTGGCCACTC	300
CTCGCAACTC	GAG					313

(2) INFORMATION FOR SEQ ID NO:336:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 467 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:336:

GAATTCGGCC	AAAGAGGCCT	AGATTGAATT	CTAGACCTGC	CTCGGCCTCC	CAAAGTGCTG	60
GGATTACAGG	CTTGAGCCAC	CACACCTGGC	CTAGTGATT	GTAATTTTCAT	GAGCTGTTGC	120
TGTATTGCCT	TCCACAGACA	GTCAATTTAT	AATCCCTCAG	TATTATATAA	TCAGGAAGAT	180
TCAGTGAATG	GAATTTTGGG	TTGGTGGAGG	ACATATTTT	TAATTGGTAG	ACCACTGAGT	240
GCTTTTGCAA	ATCTCCTTAA	ATCACATTAC	AGCAGGAACA	ACTATAGAAA	ATACAATTAT	300
TTAGGAGCAA	CCTGATCTGT	GAGCTAATTT	AATGAGTGGA	GCCCAGCCTA	CATGCTGAAG	360
AGCTCACATG	CCTCCTACCT	AGTTCCTTAA	CTAGGTTTTC	ACTCATGCCC	ATTTTGTCAT	420
ACTCTTGAAA	CCTTCCTATC	TTTGCATAGA	ACATTATTCT	TTCCACT		467

(2) INFORMATION FOR SEQ ID NO:337:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 348 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:337:

GAATTCGGCC	AAAGAGGCCT	ACTTCTTTGA	AGAACCATGA	AGTCACACTA	TATTGTGCTA	60
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GCTCTAGCCT	CCCTGACGTT	CCTGCTGTGT	CTCCCCGTGT	CCCAGAGCTG	TAACAAAGCA	120
CTCTGTGCCA	GCGATGTGAG	CAAATGCCTC	ATTCAGGAGC	TCTGCCAGTG	CCGGCCTGGA	180
GAAGGGAAC	GCCCCTGCTG	TAAGGAGTGC	ATGCTGTGCC	TCGGGGCCCT	GTGGGACGAG	240
TGCTGCGACT	GTGTGCGTAT	GTGCAACCCT	CGGAATTACA	GCGACACCCC	GCCCACATCC	300
AAGAGCACCG	TGGAGGAGCT	GCACGAGCCC	ATCCGTCCTG	CTGTGCGAG		348

(2) INFORMATION FOR SEQ ID NO:338:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 259 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:338:

GAATTCGGCC	TTCATGGCCT	AGCCAGTCTT	CAGTTATAAC	CACTCCACCC	TCCTCACTTT	60
CTCTCTCTCT	CTCTCTTTTT	TTTTTTTTTT	TTTTTTGCTA	TGGGATTTAA	TGGGAAAAAT	120
ATGTAAAAAC	TGCTACTAGT	CAGCTGGCTC	TTTTTCCTAT	GAAATCTATC	AGTACCTTTC	180
TCCATCCGTT	GTTCTCAATA	ATGACCACAG	AGCCTGAGTA	TACCAAGAAA	ACCAATATTC	240
GCATTACAGG	TCACTCGAG					259

(2) INFORMATION FOR SEQ ID NO:339:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 183 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:339:

GAATTCGGCC	AAAGAGGCCT	AGCCTTCTGC	AAGATGCTTC	TGATTCTGCT	GTCAGTGGCC	60
CTGCTGGCCT	TCAGCTCAGC	TCAGGACTTA	GATGAAGATG	TCAGCCAAGA	AGACGTTCCC	120
TTGGTAATAT	CAGATGGAGG	AGACTCTGAG	CAGTTCATAG	ATGAGGAGCG	TCAGGGACCA	180
CCT						183

(2) INFORMATION FOR SEQ ID NO:340:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 264 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:340:

GAATTCGGCC	TTCATGGCCT	AGTTTTAACT	GAGTGCAACA	AGTATTTTCG	TTAAGAGATT	60
TTTTTTTCGTA	ATTTACCATT	CTGCTGAATC	AATTTTAAAT	CCAGTTGGAA	GCTCTAAAAT	120
TCTAACATAA	TTCAGAAGCA	TTAAAAAAGA	AGACTAAGGA	AGAGAAAGCT	ACATTTTTAT	180
TTTCACTTGT	ATTGCATTGT	GCAGAAAGGA	AAATAGTCTA	GCTAATTTAC	TTTTCTATG	240
AAAAACCTTA	GAAGGCTCCT	CGAG				264

(2) INFORMATION FOR SEQ ID NO:341:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 412 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:341:

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GAATTCGGCC TTCATGGCCT AGCCTTTCTA GTCTTCCCTC TTCTGTAGGA ATANCATGTT      60
CCTCAAATGG TCCTGAACTT TTTCACCATT TTGGTGAACC CTTTAAAGT AAATTTACTC      120
AATGCTTTAA AATTCATAGT CTTAAAATAA ATGTGAATTT TGTTCACAGG TATTTATTCT      180
GGGGTACAAA AACTTCCCAG AATTTACAGT AGGAAAGGAA ACCCCTTTAT GATGTGGCTT      240
ATTATTACAA GCATTCAGAA ATGATGCTGG CTAAGTCAAA TCATTCCTTG AGACAGTGAT      300
TCCTAAATGT AATGCCGCCT TCCTGAACTC TCACATATTC TATATCATGG TTATTTTAAA      360
AAATATATTT TTAGCCTTTT GTAACCTTAG TCTGTTTTG AGCAATCTCG AG              412

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(2) INFORMATION FOR SEQ ID NO:342:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 466 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:342:

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GAATTCGGCC TTCATGGCCT AGGGATTATA GGTGTGAGCC ACCGCGCCCG GCCAGGAATC      60
ATTTTATCC AGGTAAGGCA TACAGAACCG GAGGGTTCTT GTCTAAGTTG TACCATGAAT      120
GTGTGCTCAG TGGCTACTTT GAAATAGACT TACTGTACAA TCCCTGAGCA GGAATGAAAA      180
TAAAAGCTGG AAATCACGGG TTGCTCTGGG GTTTTCAGGA AGGTGTCGTC CGTCTGGGGT      240
GAGTGTCCCTC CTTTCTCANG GGATTTCATG TGGCATTATT TTGTTTTCAT CTGAGAGGCA      300
ACATAAGCTG GGAGGGAAGG GCTGCAAAGA GGGGGCCAGG ACAAATGTGT ACCTGGGGGC      360
CCCCATTTG ACTCCACCCT GAGCTGGGGC TGGGCCACAG GAGGGCAGAG GGAACACTTT      420
GGGACGGGGA GGGAGCCCCT GACTGAAAG AATGGGGTGA CTCGAG              466

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(2) INFORMATION FOR SEQ ID NO:343:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 328 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:343:

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GAATTCGGCC TTCATGGCCT AGAATTTTGG AGTCTTTATC ATAGGTAACC TGGACCACAG      60
TTACTATTTA TTGACAATGT GATTGAGTGT ATGGAGGAAA GCACAGTGGA TGCTAGGCTT      120
TGTAATATG GGGATGTAGA AAAGCAGATA GTTCAGTGTC TACCTTTTTC TAGAACTACC      180
TTGAACCTTA AATTTTAAGT CATGTTTATT GCTAGAAAAT TAAATGTACT TATTTAAACC      240
AATGAAAAAG CACATTTCTG AAATGAAGTT AGAGATAATC TCTGTGTCTT ATAAAAAGAC      300
ATTAATAAAA ATCTGGTAAG GACTCGAG              328

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(2) INFORMATION FOR SEQ ID NO:344:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 416 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:344:

GAATTCGGCC	TTCATGGCCT	AGTGACCAGA	CATAAGAACT	CATTTTTAGT	TAAAGCATTT	60
TAAAAAAGTA	TACAAGGCAG	AGTTGCAAAC	AATCTCAGCC	TATGAAAAGG	ACAGCTGCAG	120
TCAATGTTCC	CACTAATATT	TTCCATCCGT	GTA CTGAGTG	AATTTGTAAT	GTGCAACTCA	180
TGTCAAGAAA	ATAAACAGAT	GTGCACCACA	AGCGGAACAA	CAATGAAAGA	ACTTACATAG	240
ATTTTTATTA	AGATTGAACT	TTTGATGTTG	ATTCCACTGG	TAAGAGAGCA	CTGTAGGCAA	300
AGGTCTTGTA	TTTATAAAGT	TATCTCCTAT	TGAGGAAGAT	GAAGATGTCA	ATACTCCCCA	360
ACAGAATGCT	TTGAGCTCTT	TCTAGTAGAT	CTGTGCCAAC	TCTGAAACAC	CTCGAG	416

(2) INFORMATION FOR SEQ ID NO:345:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 344 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:345:

GAATTCGGCC	TTCATGGCCT	AGTAAATACA	AAATACAAAA	ATACTGGTGA	GAGAATGGGA	60
TGATGATTAT	ATTCTTGGTT	CAGTTTTTCT	TCCTGAGAAA	TTTGATAATA	CATCTTTTGA	120
TTTTTAATAA	GTGAAATAAC	TGGTGACTGT	GTTGTATGTG	TGTGTGTGTG	TTTTTTTTTT	180
TTTTTTTAAA	TAGAAGTGTG	AAAAGAACT	TCATCCACGG	AAACTTCAGG	ATAATTTTGA	240
AACAGGCAAG	TCATTTTCTA	TCTTTTATA	ATCTCTGCCT	TGTGGGATT	GGTTTGTTT	300
ACCTAACCTT	GATTTTAGTG	GGAGTATGTG	AGCTGTGACT	CGAG		344

(2) INFORMATION FOR SEQ ID NO:346:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 544 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:346:

GAATTCGGCC	TTCATGGCCT	AGCCTTCGGA	ACCCACCCAG	AGTCACAGCC	AGGAAGGGCA	60
GCGGGGCGCA	CCAGGCCGAA	GGCTCACGCC	ACAGGGAGGG	CAGCTAGGAC	ATGGGGGGAA	120
GCGCGTTAAA	CCAGGGAGTC	CTGGAAGGGG	ACGACGCCCC	CGGCCAGTCC	CTGTACGAGC	180
GGTTAAGTCA	GAGGATGCTG	GACATCTCGG	GGGACCGGGG	CGTGCTGAAG	GACGTCATCC	240
GAGAAGGAGC	TGGAGACCTA	GTGGCGCCTG	ATGCTTCGGT	GCTAGATGCT	TCGTCTGGG	300
TAAACTCCTC	GACTCCCAAG	GCCCCAGCTC	CATCTTTACC	TCAGAGCCTC	CTGAACCTCC	360
TCCTCCAGCC	TCACCTTCCT	CCAGCCTCAC	CACTCCTCCC	TGGACCTGCA	GCTCCGCACC	420
CCCGGGGGCC	TCAGAACTAC	CCCTTCCAGG	GCCTCAGAAC	TACCCCTACG	GTTTCTCCTG	480

CGTAACCTTC TGCCTACCTT CCTGAGAGTG GTTGGTGACA GCAGCCGGGG CTAGAAACCT
CGAG

540

544

(2) INFORMATION FOR SEQ ID NO:347:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 570 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:347:

GCCTTCATGG	CCTACCCAGT	GATTGTCACC	ATGGCCAGCA	AGAGGAAATC	CACCACACCA	60
TGCATGATCC	CAGTGAAGAC	TGTGGTGTG	CAAGATGCCA	GCATGGAGGC	CCAGCCCGCT	120
GAGACCTTGC	CTGAAGGACC	CCAGCAGGAT	CTGCCCCCAG	AAGCATCTGC	TGCCAGCAGT	180
GAGGCAGCAC	AGAACCCAG	CAGTACTGAT	GGCTCTACAC	TGGCCAATGG	GCATCGGAGC	240
ACTTTAGATG	GCTATTTATA	TTCCTGTAAA	TACTGCGATT	TCAGATCCCA	TGACATGACC	300
CAATTTGTGG	GACATATGAA	CTCAGAGCAC	ACAGACTTTA	ATAAAGACCC	AACCTTTGTA	360
TGCAGTGGGT	GCAGTTTCT	GGCAAAAACC	CCTGAGGGGC	TTTCCTTGCA	CAATGCCACA	420
TGTCACTCCG	GGGAAGCCAG	CTTTGTGTGG	AACGTGGCCA	AGCCAGACAA	TCATGTGGTT	480
GTGGAGCAGA	GCATCCCTGA	GAGCACCAGC	ACTCCTGACC	TAGCGGGTGA	GCCCAGTGTCT	540
GAAGGGGCTG	ATGGACAGGC	AGAGCTCGAG				570

(2) INFORMATION FOR SEQ ID NO:348:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 300 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:348:

GAATTCGGCC	TTCATGGCCT	AGAAAAAGT	TTTCAAAGGG	AAGTAATCTT	AAATCTGTAT	60
ACTATTTTCT	ATGATGGAAA	TTCTGTGAAG	AAACAATAAC	AAATTCTCCC	TGACTCCTGT	120
CTGTCCTAAT	AGTAAGGTGG	TCTTTCTTCT	AATCTCCCCA	TCCATCCACC	CATCAGGAAG	180
CAACAGGGTA	CCTTGTGTGA	GTAAGTGTAG	ATTTCTGACT	TCTTCTCGCA	CCTTCAGCTG	240
GAGCACCTGT	TGTAAGATGT	GCTGCCGGAG	GTTCTCCTGG	GCAATCCCCA	TTGCTCGAG	300

(2) INFORMATION FOR SEQ ID NO:349:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 424 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:349:

GAATTCGCCC	TTCATGGCCT	AACAACCACC	ACCACCTGGA	CGCCCAGCAG	CACAACCACC	60
ATAGCCGGCC	TCAGGGTCAC	AGAAAGCAA	GGGCACTCAG	AATCATGGCA	CCTAAGTCTG	120
GACACTGCCA	TCAGGGTTGC	ATTGGCTGTC	GCTGTGCTCA	AAACTGTCAT	TTTGGGACTG	180

CTGTGCCTCC TCCTGTGGTG GAGGAGAAGG AAAGGTAGCA GGGCGCCAAG CAGTGACTTC	240
TGACCAACAG AGTGTGGGGA GAAGGGATGT GTATTAGCCC CGGAGGACGT GATGTGAGAC	300
CCGCTTGTGA GTCCTCCACA CTCGTTCCCC ATTGGCAAGA TACATGGAGA GCACCCTGAG	360
GACCTTTAAA AGGCAAAGCC GCAAGGCAGA AGGAGGCTGG GTCCCTGAAT CACCGACGCT	420
CGAG	424

(2) INFORMATION FOR SEQ ID NO:350:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 445 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:350:

GAATTCGGCC TTCATGGCCT AATTAGATTA TTTTGAGCTT GGAACACTT GTACATGGTT	60
CCCCGGGACA TAAATGTAGA AGTTCGTAG AGCAGTATCT TCACATTGAG GGATGTGAAG	120
GCTTTGCAGA GTATAGATAG TTTAATGTAA TTTAGAGTTC TTCATTATCT TTCCTAGGAT	180
CAGATATCTG CCGATGATGA CTTCTAACCC ATTCAGAATC TTTCTATGGT ATATTGCCCT	240
GGGGTGTAAT ATCCTCCAGG ACCCTAAACA GATGGACAGT TGATGCATTT CAGGGTAAGC	300
TGTAGACAAC AATATATTG ACCCCTGAAA CAATTCAGTA TGCTTGTCTT TTGTTAACTA	360
GAGTTATTTC AAACATAATT TTGAATAAAA AATAAATTTT AATAAATACA TGTTCCTCAAT	420
TATGCATATA AAAGCAATCC TCGAG	445

(2) INFORMATION FOR SEQ ID NO:351:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 278 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:351:

AATTCGGTTC ATGGCCTAAT TTTGGAAC TAAGACAGAT TTTTGTGTTT TGTTTTTTTA	60
AATAGCTGTT AACTAGTCTC ATAAGGACAA AATACAGAAA GACAGTTCTT ACAGAGAAAT	120
AGAAGCAAAA AAAGGAACCA ATGGAAAATT TAAAACTGAA AAATAGAATA TCTGAAATAA	180
AAAATTCCT AGATGACATA ACTGTTGAGG AAAGAGTATG TGAATTTGAA GAAAGAGCAA	240
TAGAAATGTT CCATTGTAAA GAACAAAGAG AACTCGAG	278

(2) INFORMATION FOR SEQ ID NO:352:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 457 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:352:

GAATTCGCCT TCATGGCCTA CAGATTATCT TACACTGAAC TGATCAAGTA CTTTGAAAAT	60
GACTTCGAAA TTTATCTTGG TGTCCTTCAT ACTTGCTGCA CTGAGTCTTT CAACCACTTT	120

TTCTCTCCAA	CCAGACCAGC	AAAAGTTCT	ACTAGTTTCT	TTTGATGGAT	TCCGTTGGGA	180
TTACTTATAT	AAAGTTCCAA	CGCCCCATTT	TCATTATATT	ATGAAATATG	GTGTTACGT	240
GAAGCAAGTT	ACTAATGTTT	TTATTACAAA	AACCTACCCT	AACCATTATA	CTTTGGTAAC	300
TGGCCTCTTT	GCAGAGAATC	ATGGGATTGT	TGCAAATGAT	ATGTTTGATC	CTATTCGGAA	360
CAAATCTTTC	TCCTTGGATC	ACATGAATAT	TTATGATTCC	AAGTTTTGGG	AAGAAGCGAC	420
ACCAATATGG	ATCACAAACC	AGATGGCAGG	ACTCGAG			457

(2) INFORMATION FOR SEQ ID NO:353:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 295 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:353:

GAATTCGGCC	TTATGGCCTA	GCAGGCGCCA	AGGTAACATG	AACAAACAGC	TGCTTGCTGC	60
CCCCAAGCTT	TAGTTTCTAG	TGGGCTTGA	GCAATTGTGA	AGGACAACCTC	CACCCAAGGC	120
CCAGTATGA	AGAGGGGTAG	GGTGGGAGGA	TTGTACATAT	CGCGAACGCT	TGGCAAATCT	180
CTAGATTTTT	TTTCCTCCTA	GGAAATAATA	ATTTTTAAAA	AGGCTTGTA	AAAATAATAA	240
AATGTTTCAT	GACAGCAGCA	GATGTAAAC	TCCAGTACT	CCGGGCGACC	TCGAG	295

(2) INFORMATION FOR SEQ ID NO:354:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 414 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:354:

GCCTAGACAT	GATGGTGGCC	ACGTGCCAGG	GGACCACACC	CTATGTACAA	AGCAGGAGAA	60
TGATGCTCCC	AGCTGAGCTG	CAGGATGGGC	GCTGGGCTGA	CTGGAGGGGT	AGACGGGGTG	120
GGGTCTGACC	CCATTAGCCT	TTCCCCATCC	AACCTGGGCC	CCCATAAGCC	ATTCTCTGGC	180
CCTCTGCACA	AGACAGACTC	AGCAAATCTG	CGAGGTATGG	GGATTCTGCC	AACCTCCAC	240
CTCGCTCAC	CTTCCCTAGG	TCTGCGCCTT	AGGAGATTCT	GGAGCCAGAG	GGAGAGACCC	300
CAGAACTCC	CCGGTCGGCG	ACCCAGCCCG	AGACGCCTGG	GGTCCCAAGG	GAAGCTGAAC	360
GCCCGCAGAA	TGGGGAAATG	GAGAGAGAAC	CTGAAAGAGC	CCCTGTAAC	CGAG	414

(2) INFORMATION FOR SEQ ID NO:355:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 443 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:355:

GAATTCGGCC	ATCATGGCCT	ACTCCCGAGT	AGCTGGGACT	ACAGGCATGT	GCCACCACGC	60
CCAGCTAATT	TTTTGTATTT	TTTTTAGTAG	AGATGGGGTT	CCACCATGTT	AGCTAGGATG	120

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ATTTCGATTT CCTGACCTTG TGATCCGCCC GCCTCGGCCT CCCAAAATGC TGGGATTATA 180
GGTGTGAGCC ACCACGTGGC CTCATTTTCAT TCTTTCATGT GGATAGGCAG TTGTTCCAGA 240
AGTATATAGT GAGGAGCTTC TTCTTTCTCT AATGATCTGC AATGTCACCT TCATCATTTA 300
TGAAGGTTGC ACATATACAT GGAATTTTTT TAGTCTGGCA TTAAATGTTC TTCAAAGAG 360
TTCCTGCAA CGTTTTTGTT TTTATTTTCT ACTGTTCCCT TCACGTACTC TCTACTGAAC 420
TAAACTCTCT AATGTGTCTC GAG 443

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(2) INFORMATION FOR SEQ ID NO:356:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 286 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:356:

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GCGATTGAAT TCTAGACCTG CCTCGAGCTC AAGAGCAGCC CACCTGTTCA GTATTCATAC 60
CCACATATCC ATAATAGAGC TCTTCTCTTC CCCCGGGTTC CTCTGCCTCA GCCTTTTCTT 120
CTTAGCAGAT GCCATCTGCA GGGCCACTTG GCTGCCCCGTA GCAGTAACCG CACAGTCTTC 180
CACATTTACT CCCTCAGCCT CAGCTGCTCC TGCAGCCAG GCAGTGTCTC TGTCTCTGCA 240
TTGCTCAAGC CTCACCATC TCGGTACAC CCCACAGCCA CTCGAG 286

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(2) INFORMATION FOR SEQ ID NO:357:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 269 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:357:

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GAATTCGGCC TTCATGGCCT ACTGCCTTAG CCTCCCAAAG TGCTGGGATT ACAGGCGTGA 60
GCCACCATGC CCAGCCCTAT AGTAGTTCTT CTTTGCCCC TTAATATCCT CACCCACATG 120
TCCTGTACCC TGCCTGAACC CTCCTCCTCT TTTGTGTTCTG ATCTTTGAGC TCCCTAGAGC 180
CCATAATTCT TTAGAGCAGG TATGTCCCGA GTCTGAAACA TGCCCTTATT TGTCCCAAGC 240
TCTGGACATT TCTACCCCA TCTCTCGAG 269

```

(2) INFORMATION FOR SEQ ID NO:358:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 250 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:358:

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GAATTCGGCC TTCATGGCCT ACCAAGGAAG CCTTCTGTGTT TTTGGCCCAA GGAGCGTCAA 60
TAAGATCTTT GAAAATACTT TGAAGTCATT TTGTGTGTGT GTATGTGCAT ACACACCTGA 120
TTTGTTTTAT TTTTATTTT TATTTTGTGA GTTAGGGTCT GGCTCTGTCTG TCCAGGCTAG 180
AGTGCAGTGG TGTGGTCTCA GCTCACTGCA ACCTCTGCCT CCCAGGCTCA AGCCGCCCCC 240

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CCACCTCGAG

250

(2) INFORMATION FOR SEQ ID NO:359:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 258 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:359:

GAATTCGGCC TTCATGGCCT AATGGGAGAT TGGTGGGAGT AGGGAACACA AAAGGCATGG	60
GAAAAGAAGA TAGGTTGTAT TTGGTTCATA CTGACACCAA CATGCCTAAA GGATAGCCCT	120
GTGAAAAAAG CTAGCAGACA GTTGAACGTC GGCTGTGAAA CAGGAAGCCG TGAGGGCTAG	180
ACTCATCGTT GTAGTCATTC GTAAAGAGTA AATACTTGGA GCTATTGTAG TAGATGGTAT	240
CACCACGGAA CACTCGAG	258

(2) INFORMATION FOR SEQ ID NO:360:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 259 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:360:

GAATTCGGCC TTCATGGCCT AGGAAGCCAC AGGTCGGCTC TGCATTAGCA GGAGCAGCCG	60
CCCTCGCTGG CCGGGGGCTC CTGGGGTTTG TCCAGCTTGA TGTCGATCAT CCCTTCTTTG	120
CTTTTCTCCT GGACATTCTC CATTCCGGGT AGAGCCGACG CCACACGTCG AAAAAGCTGC	180
TTCACGTTGT AGCCAGTCTT CGCACTGGTC TCAATGAACA TGACGCTCAG TTCTTTGGCG	240
CGCTGCCCCC CCCCTCGAG	259

(2) INFORMATION FOR SEQ ID NO:361:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 422 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:361:

GAATTCGGCC TTCATGGCCT AAAGATTAGC CTGGGTAACA TAGTGAGACC CTGTCTCTAT	60
TAAAAAATAA TAATAAAAAT AACATTCACA TTGGTATTGT TCACTAAGGT ATTGGTTGTT	120
AAGGCATTCA TTAAGGTATT GTTAAACTT GTGTTAAGCA TGTTAAAGTC TCAGTAACTT	180
TGGGATAGAA ATAAATGTG ATAAAAAGCT GAAAGAAACC ACCACAAGGG AGAGTCCTTT	240
TTGAAATATT AGAGACATAA TGCTGTCTAA TAAAAACGA CATCAAAGAA AAACACTACT	300
ACAGTGACTG CAGACTTAAT GTTGGCCAAC CATGCATCCT CCCTAGAAAT GCATTGAAT	360
TTGATTTACT AATCTTTTAT TTAGGAAATT TACATTTTTA CATTAGTGAG ATTGGCCTCG	420
AG	422

(2) INFORMATION FOR SEQ ID NO:362:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 288 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:362:

GAATTCGGCC	TTCATGGCCT	AGTTATTCTT	CTAATAGCTC	AGCTACTTTT	CCTTAAAATA	60
TCTTTTTCTC	TGCAAAGCCT	TCATATAATT	GTTGTTATTA	TAACAGTGAT	GATGACTGCC	120
ACTCATTACA	ACTGCTGTTG	TTAATCTTTG	TTGTTATTTT	AAACCATATG	TTATTTAAAC	180
CATAAACTGC	ATCATAAAAG	CAGTTTCTTT	CTAATCCATG	ATGACACCTG	CTAGCCAGGT	240
ATCGTATCAA	TTCTTCACAG	GTCTATTGAA	TTCTAGACCT	GCCTCGAG		288

(2) INFORMATION FOR SEQ ID NO:363:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 264 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:363:

AAAAATTTC	ACAAATCCTG	AAGTCTTTCT	GTGAAGTGAC	CAGTTCTGAA	CTTTGAAGAT	60
AAATAATTGC	TGTAAATTC	TTTTGATTTT	CTTTTCCAG	GTTTCATGGT	CTTGGTAATT	120
TCATTCATGG	AAAAAAATCT	TATTATAATA	ACAACAAAGA	TTTGTATATT	TTTGACTTTA	180
TATTTCTG	GCTCTCCTGA	CTTTGTGAAA	AAGGGTGATG	AAAATGCATT	CCGAATCTGT	240
GAGGGCCCAA	AACAGAGACT	CGAG				264

(2) INFORMATION FOR SEQ ID NO:364:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 260 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:364:

GAATTCGGCC	TTCATGGCCT	AGACCCTCAT	CAATAGATGG	AGACATACAG	AAATAGTCAA	60
ACCATATCTA	CAAAATGCCA	GTATCAGGCG	GCGGCTTCGA	AGCCAAAGTG	ATGTTTGGAT	120
GTAAAGTGAA	ATATTAGTTG	GCGGATGAAG	CAGATAGTGA	GGAAAGTTGA	GCCAATAATG	180
ACGTGAAGTC	CGTGAAGGCC	TGTGGCTACA	AAAAATGTTG	AGCCGTAGAT	GCCGTCGGAA	240
ATGGTGAAGG	GAGACTCGAG					260

(2) INFORMATION FOR SEQ ID NO:365:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 332 base pairs
- (B) TYPE: nucleic acid

(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:365:

GCGCCTATCA	CAAGCAGATC	ATGGGTGGCT	TCAAGGAGAC	GAAGGAGGCT	GAAGATGGCT	60
TCCGCAAGGC	CCAGAAGCCT	TGGGCCAAGA	AGATGAAGGA	GCTGGAGGCA	GCCAAGAAGG	120
CCTACCATT	GGCTTGCAA	GAGGAAAAGC	TGGCCATGAC	ACGGGAGATG	AACAGCAAGA	180
CGGAGCAATC	GGTCACACCT	GAGCAGCAAA	AGAAGCTGCA	GGACAAAGTG	GACAAGTGCA	240
AGCAGGATGT	GCAGAAGACA	CAGGAGAAGT	ATGAGAAAGT	GCTGGAAGAT	GTGGGCAAGA	300
CCACACCCCA	GTACATGGAG	AACAACTCG	AG			332

(2) INFORMATION FOR SEQ ID NO:366:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 330 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:366:

GAATTAACAG	AGTTTTTCAGA	ATTAGAATAC	TCAGAAATGG	GATCATCGTT	CAGTGTCTCT	60
CCAAAAGCAG	AATCTGCCGT	AATAGTAGCA	AATCCTAGGG	AAGAAATAAT	CGTGAAAAAT	120
AAAGATGAAG	AAGAGAAGTT	AGTTAGTAAT	AACATCCTTC	ATAATCAACA	AGAGTTACCT	180
ACAGCTCTTA	CTAAATTGGT	TAAAGAGGTT	GAAGTTGTGT	CTTCAGAAAA	AGCAAAAGAC	240
AGTTTTAATG	AAAAGAGAGT	TGCAGTGGAA	GCTCCTATGA	GGGAGGAATA	TGCAGACTTC	300
AAACCATTG	AGCGAGTATG	GGATCTCGAG				330

(2) INFORMATION FOR SEQ ID NO:367:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 200 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:367:

GCGATTGAAT	TCTAGACCTG	CCTCGAGTAC	GGAGCGAAAC	TCTGTCTCAA	AAAAAAAAAA	60
AAAAAAAAAA	ACCGAGTATA	AAAGGCATTT	TTTTCCTTTA	AACTAAGTAA	AATATAATGT	120
TGAATAGTTC	TATTTTGCTT	AACGGGCTTT	TGTTATTGT	TTTGTGTAGA	AATTGGCATT	180
TTTCACATAG	AAATCTCGAG					200

(2) INFORMATION FOR SEQ ID NO:368:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 368 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:368:

GAATTCGGCC	TTCATGGCCT	AGAGAAATGA	GGAAAAAGAA	GGAAGAATAT	TTAACTTTTA	60
GTCCTCTTAC	AGTTGTAATA	TTTGTGGTCA	TCTGCTGTGT	TATGATGGTC	TTACTTTATT	120
TCTTCTACAA	ATGGTTGGTT	TATGTTATGA	TAGCAATTTT	CTGCATAGCA	TCAGCAATGA	180
GTCTGTACAA	CTGTCTTGCT	GCACTAATTC	ATAAGATACC	ATATGGACAA	TGCACGATTG	240
CATGTCGTGG	CAAAAACATG	GAAGTGAGAC	TTATTTTCT	CTCTGGACTG	TGCATAGCAG	300
TAGCTGTTGT	TTGGGCTGTG	TTTCGAAATG	AAGACAGGTG	GGCTTGGATT	TTACAGGATA	360
TTCTCGAG						368

(2) INFORMATION FOR SEQ ID NO:369:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 299 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:369:

GAATTCGGCC	TTCATGGCCT	ACATTCGGAG	AAGTTGAAAG	AATTACACCC	AGAACACCCA	60
TGTCTACCAT	GTTACTACAT	TTGTGTGTGT	GTGTGTGTGT	GTGTGTGTGT	GCGTGTGCAA	120
TTTAAATTAC	AATGGTCGAG	GAAGCTCTTG	CTGAGAAGGT	GATGTTGAAT	AAAGACTCTA	180
AAGACCCTAA	AGAGTTGAGA	GAGAGCTGTG	TGGAGTTCTG	GGGCCCAGGC	ACAGCAAGTA	240
CAAAGATCCT	GAAGCAGGAG	CATTCTTGGT	GTGTTCAAGG	AAAGCAGGAC	AACCTCGAG	299

(2) INFORMATION FOR SEQ ID NO:370:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 289 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:370:

GAATTCGGCC	TTCATGGCCT	ACCGCCTTTC	CATTATGCAA	CTGTGGTGGC	TTTCTTTTGG	60
TTATACGACG	ATTATTTGTC	AACCCCACTA	TCTTTGCACT	CAACCATGGG	CCCCCTGGGC	120
TCAGAGACCT	CGTGACAGTC	ATCTTCTCAT	CACCACATCT	GCAAATGTGT	GGGTGGATGG	180
GGCAGCAACA	GTCCACCTCC	TCCAAGAAGC	AGTCCCTGAT	TTTCCTCCC	CAGACAAATC	240
TTCGTCTCTC	TGTTCTTGA	AACTCAAAGA	ACTAAGCACC	TCCTCGAG		289

(2) INFORMATION FOR SEQ ID NO:371:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 540 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:371:

AATTCGGCCT	TCATGGCCTA	CAAGCTCGAT	CATTATCCTT	CTGTGAGTTA	CCATCTGCCA	60
AGTTCATCCG	ACACCTCTT	CAATTCTCCC	AAGTCGCTCT	TTCTGGGAAA	AGTTATAGAA	120
ACAGGGAAAA	TTGACCAAGA	GATTCACAAA	TACAACACCC	CAGGATTCAC	TGGTTGCCTC	180
TCCAGAGTCC	AGTTCAACCA	GATCGCCCCT	CTCAAGGCCG	CCTTGAGGCA	GACAAACGCC	240
TCGGCTCACG	TCCACATCCA	GGGCGAGCTG	GTGGAGTCCA	ACTGCGGGGC	CTCGCCGCTG	300
ACCCTCTCCC	CCATGTGCTC	CGCCACCGAC	CCCTGGCACC	TGGATCACCT	GGATTACAGC	360
AGTGCGGATT	TTCCATATAA	TCCAGGACAA	GGCCAAGCTA	TAAGAAATGG	AGTCAACAGA	420
AACTCGGCTA	TCATTGGAGG	CGTCATTGCT	GTGGTGATTT	TCACCATCCT	GTGCACCCTG	480
GTCTTCCTGA	TCCGGTACAT	GTTCCGCCAC	AAGGGCACCT	ACCATACCAA	CGTTCTCGAG	540

(2) INFORMATION FOR SEQ ID NO:372:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 527 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:372:

TCGACCCCTG	GCTAATGACA	AACTATGTGA	CCTTCATGGT	GGGGGAGATT	CTGCTCCTCA	60
TCCTGACCAT	CTGCTCCCTG	GCTGCCATCT	TTCCCCGGGC	CTTTCCTAAG	AAGCTTGTGG	120
CCTTCTCAAC	TTGATTGAC	CGGACCCGCT	GGGCCAGGAA	CACCTGGGCC	ATGCTCGCCA	180
TCTTCATCCT	GGTGATGGCA	AATGTCTGTT	ACATGCTCAG	CTGTCTCCAG	TACTACACGG	240
GACCCAGCAA	TGCAACGGCA	GGGATGGAAA	CGGAGGGCAG	CTGCCTGGAG	AACCCCAAGT	300
ATTACAATA	TGTGGCCGTG	CTGTCCCTCA	TCGCCACCAT	CATGCTGGTG	CAGGTCAGCC	360
ACATGGTGAA	GCTCAGCTC	ATGCTGCTCG	TCGCAGGCGC	CGTGGCCACC	ATCAACCTCT	420
ATGCCTGGCG	TCCCGTCTTT	GATGAATACG	ACCACAAGCG	TTTTCGGGAG	CACGACTTAC	480
CTATGGTGGC	CTTAGAGCAG	ATGCAAGGAT	TCAACCCAGG	GCTCGAG		527

(2) INFORMATION FOR SEQ ID NO:373:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 407 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:373:

GGCAAGAAAG	GATGTCCGCA	CAGCTGGCTG	CTGCTGAGAG	CAGACAAAAG	AAGCTGGAAA	60
TGGAGAAGCT	TCAGCTACAA	GCCCTTGAGC	AAGAGCACAA	GAAGCTGGCT	GCCCGCCTTG	120
AGGAAGAGCG	TGGCAAGAAC	AAGCAGGTGG	TCCTGATGCT	GGTCAAAGAG	TGCAAGCAGC	180
TCTCAGGCAA	AGTCATAGAG	GAGGCCCGA	AGCTCGAAGA	CGTAATGGCC	AAACTGGAAG	240
AGGAAAAGAA	AAAGACGAAT	GAATTAGAAG	AGGAACTCTC	CGCTGAGAAA	CGAAGAAGCA	300
CAGAAATGGA	AGCTCAGATG	GAAAAACAAC	TCTCTGAGTT	TGACACTGAG	CGGGAACAGC	360
TTCGTGCCAA	GCTGAACCGG	GAAGAAGCAC	ACACCACAAA	CCTCGAG		407

(2) INFORMATION FOR SEQ ID NO:374:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 322 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:374:

GAATTCGGCC	TTCATGGCCT	ACTCTGTTTT	CTCCCTGGAC	TTATGTGCTT	CGTCTGGAAT	60
GTTACATCTC	TTCCTCTCTT	TCTTTTTTTT	TGGTCCCCAT	GTTGACTGTT	TTATTGGGGT	120
TTCTGGATAT	CTCGGGGCCA	CCTCACAGGA	AGCGGTTTGC	AATGAGATCA	TAAACATTGC	180
CGAAAAATCT	GTTCATTACT	GCAGCACTGT	TTCTCATCCC	CTTGACTTTC	ATCACAAGGT	240
ATCCCCTTCT	GACAATAAAT	CATCTTTAAT	CATTTCTCAG	CAACCTCAAG	CCCAGCAGCG	300
AAGAGTCACC	CCCTATCTCG	AG				322

(2) INFORMATION FOR SEQ ID NO:375:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 480 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:375:

GAATTCGGCC	AAAGAGGCCT	ACCTAAACCG	TCGATTGAAT	TCTAGACCTG	CCCCAAAACC	60
AACAAGGAGA	ACAAGCTCAG	TCTTCTGTGT	CTTAATTTT	GGCTTTACTC	TTAGCCCTGC	120
CCCATTTTCT	AGGCTCTCCA	CAGTCCAGCC	GCTTTGAGCT	ACTTTTCCTT	CCCTGATATG	180
TGCAGCTCTC	TCACCTCTGA	GCCTCCGCAC	CTGCTGTTCC	ACAGCACTCT	CCGCATTGCC	240
TTCTCCCACT	GTGGCTCACT	GCTGAGCTGT	GTTCAGGCCC	TTGGGAAAC	CCTCTCTTTC	300
ACTCCTTTTC	CCTGGTCTGG	CTTGGGAGCC	CATGCTTACC	CCTGTCAGGA	CACCTTGAAA	360
CCCAGCAGTG	AAAACATGAC	ACTTCCTTGT	CTGGCTGATT	TTCTTAGTGA	AGCGAGTAGG	420
AGTTTCCTTT	GTCAAGACTT	CAGCAAGCAA	AATTCAGGAG	AGGTCATAAA	ATGTCTCGAG	480

(2) INFORMATION FOR SEQ ID NO:376:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 283 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:376:

GAATTCTAGA	CCTGCCTCGA	GTAACCAGAG	AGTCTTGTC	ACATTAACAC	TAGCAGTATT	60
TCCAACACTT	TATTTTTTTA	ACTTCCTTTA	TTATACAGAA	GCAGGATCTA	TGTTTTTTAC	120
TCTTTTTCG	TATTTGATGT	GTCTTTATGG	AAATCATAAA	ACTTCAGCCT	TCCTTGGATT	180
TTGTGGCTTC	ATGTTTCGGC	AAACAAATAT	CATCTGGGCT	GTCTTCTGTG	CAGGAAATGT	240
CATTGCACAA	AAGTTAACGG	AGGCTTGGGA	AACTGAGCTC	GAG		283

(2) INFORMATION FOR SEQ ID NO:377:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 324 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:377:

GAATTCGGCC	TTCATGGCCT	AAACAGCAAA	GAACAACTCA	TCACCGCTCA	CGTTCAGTAT	60
CTCCTCATCG	CGGCAATGAT	CAGGGAAAGC	CGCGTTCACG	TTTACCAAAT	GTGCCATTAC	120
AGAGGAGTTT	AGATGAAATT	CATCCAACAA	GAAGGTCACG	TTCTCCAACC	AGACACCATG	180
ATGCCTCCCG	AAGTCCAGTT	GATCATAGAA	CCAGAGATGT	GGATAGTCAG	TATTTATCAG	240
AACAAGACAG	TGAGCTTCTT	ATGCTGCCCA	GAGCAAAACG	AGGACGAAGT	GCAGAATGCC	300
TACATACTAC	CAGAATGTCT	CGAG				324

(2) INFORMATION FOR SEQ ID NO:378:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 352 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:378:

GAATTCGGCC	TTCATGGCCT	ACTGAAATTT	CAATAAAACC	AGCTTGAAAG	TTCCATTACT	60
AGAAAGATAA	GAGTGGTCAG	AAAACATTTT	TTATTAACCT	ATTTTCATCTA	GTAAGAGTAT	120
CTTAAATGTT	TTTTCTCTTG	AGTACTGAAT	ACACATGCAG	GACAATGGAC	CTAAATACAG	180
TTAACTTTTG	TTTTTCACTC	CTTTGCTTTT	GCATTGTCAA	TAGTCCGGTA	AGGTTTAGGT	240
TCTATCAGAA	GTACTCAGAC	ATGCAGTGGG	CAATCGATAA	TTTCTACCTG	GGCCCTGGAT	300
GCTTGGACAA	CTGCAGGGGC	CATGGAGATT	GCTTAAGGGA	ACAGTACTCG	AG	352

(2) INFORMATION FOR SEQ ID NO:379:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 271 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:379:

GAATTCGGCC	TTCATGGCCT	AGTCTGTGTG	TAGTGGAAC	TCTATTGCCT	GCCCTGCACA	60
TCTGCTCCTT	TTCTTCTCTG	CACTCTGGGA	CAGCTTCTAA	AGTTTGTCCA	ACATGTCATT	120
GACTGAGTTT	TGTATCATTT	CAGTTCTGCT	CTTTACTGGT	TCCTATGTGG	ATGCTAATTA	180
TGCAAATGCA	TTTTCCACCT	CTTGCACTCC	TTTTTCTAAG	TCACCTCACT	TCTCATTTCC	240
TCATGTTTTT	CCNTTATCCT	CTTCTCTCGA	G			271

(2) INFORMATION FOR SEQ ID NO:380:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 371 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:380:

```

GAATTCGGCC TTCATGGCCT AACGCGGCCA GCGGATTCGG TGAAGCGATT CCTGCAGGCG      60
TTGGTTCCCC TCTTTGACCT GGTACAAAGA ATTTTACGTG AAAGATTTTG TCGTCAGAGT      120
CCACATAGTA ACCTATTGG AGTGCAAGTA CAATACAAAC ACTTAAGTGA GCTGCTGAAA      180
AGAACTGCTC TCCATGGAGA GAGTAACTCT GTCCTTATTA TCGGACCCCG AGGATCAGGA      240
AAACTATGT TAATAAATCA TGCTTTGAAA GAACTCATGG AAATAGAAGA AGTGAGTGAA      300
AATGTATTAC AAGTTCACCT AAATGGACTG CTGCAGATCA ATGACAAAAT CGCCCTAAAG      360
GAAGTCTCGA G                                     371

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(2) INFORMATION FOR SEQ ID NO:381:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 277 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:381:

```

GCAGAGTTAA GCAAATTAAT TATAGCTATC TTTAAGCTAT AAATGTGTTA ACATGTATAT      60
ATACCATTTA TTATGTTCTA CTTTAGTGAT ATACCTTAAT TTAGTGGGCT TTGGCAGGGC      120
GGGGGAGGGG GAACGTTTCA TAATCTCTGA GGAACACAAA ACCTGTTTTT TACTTGAGTC      180
TAACATATGG TCCCAATTTA TTAATACTTC TGTTAAATTT GATGTCAGGT CAACATTTTT      240
CAGAAATGTA TTTATTCTCA GAAACAGAAC ACTCGAG                                     277

```

(2) INFORMATION FOR SEQ ID NO:382:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 290 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:382:

```

GAATTCGGCC TTCATGGCCT AGTTGTTACT GGAGTTAAAG AGAGAACTGA GAAAGACAAA      60
GGAGTAGAAC GTTTACTCAA ATAAGTAATA ACAGAAAACCT TTCCAAACCA GAATATACAG      120
GTACAGGAAG GTCAAGGGTC ACCAATCCGA GTTAACTCAG ACAAGAATAC TCCAATTTC      180
AAACTCATAA GGGTCAAAGA CAAAGAGAGA ATTTAGAAAA CAGCAGGAGA ATAGAAGCAA      240
ATAACATATA AGATAGATCC AATATGCTTG GTAGCAGATT TCTCAGCAGG                                     290

```

(2) INFORMATION FOR SEQ ID NO:383:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 241 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:383:

```

GAGAGTGTGG AGAGGGTACA TTTCCCTTGT ATNCTATGTT CTTCCTTCTA GTGGGTCTCA      60
TGTAAGATA GAGATATTTT TTTGTTTTAG AGATTCCAAA GTATATATTT TTAGTGTAAG      120
AAATGTACCC TCTCCACACT CCATGATGTA AATAGAACCA GGAATAAATG TGTCNTTGTG      180

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ATAATCCCAT AGCAATTTAT GGTAAGAACA AGACCCCTTT CCCTCACCAC CGAGTCTCGA
G

240

241

(2) INFORMATION FOR SEQ ID NO:384:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 299 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:384:

GAATTCGGCC TTCATGGCCT AGAAACACAA TAAAGCCCCA CAACAGCAAA CTTTTTAAAC	60
GACGAAAGAG AGCTCTAAAT AACAGCAAAA TGCTGCTCTT CTTGCTCCCA TTATGTTTAC	120
TATTACTGTG CTCTAGTGAG AATAGCAAGG GGTCAAAGGA ATTTATAACA CTTCTATAC	180
CTTCAACTTA CCAAGTCCCC TACCAAGTAA CAGTTTCTG TCAGAGAGAA AGTTCTGCCC	240
TCCCTGCTCA AAGGTGTCCA TGCCAAC TAGTACCTG GGTCTCGAG	299

(2) INFORMATION FOR SEQ ID NO:385:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 546 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:385:

GAATTCGGCC TTCATGGCCT AGAAGAGGT GGCAGAAGGA ATGGTAGGAA GGGGAGGATG	60
TAAGCGATAT CATCAAGTCA GAATCATGAG TTCTTGGTGC CCGATGTTA GAGGAGGGAA	120
AAGGTGAAGA TGGCTGAAGC TGTACACTTT CATGATGGTG GAATGGAGGG GTCCCTTGGG	180
AATTAGGGGT GTCTCTAGGA AGAACCAGCT TAGGGTACAT TGAGAAAGAG GAGACAGGCT	240
AGGCAGGTCT AGAATTCAAT CGCAGATCAC AGCTACAAGG ACCAGGCCTT TGATACTCTG	300
AGCCTCGATA GCTCTGATAG CATGGAGACC AGCATCTCTG CTTGCTCACC AGACAACATC	360
TCTAGTGCCA GCACTTCAAA TATTGCTAGA ATAGAAGAAA TGGAGAGACT TTTGAAGCAG	420
GCTCATGCAG AAAAGACGCG GCTGCTCGAA TCCAGGGAAC GGGAAATGGA AGCCAAAAAA	480
CGAGCCCTGG AAGAAGAAAA ACGACGCCGG GAAATCCTGG AAAAACGATT ACAGGGATAG	540
CTCGAG	546

(2) INFORMATION FOR SEQ ID NO:386:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 317 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:386:

GTTAGGATCA TACATCATAG GTGTATGTTT AACTGTTCAG GAAACTGCCA AACTGTTTCC	60
CAAAGTGTTT GTATTGTTTT ACATTTCAC GAGCAGTGTG TGAGAGCTCC AGTTCTTGCA	120
CATCCTAGCC ACAAAAAGGT TCTGTTTTTT AAAGACAATT TTTTTTTTCT TTGAGAGTTT	180

CGCCCTAGTC GCCCAGGCTG GAGTGCAGTG GTAAGCGAAT CCCTGCTACA GGCCAGAGAC 240
 TGTTCCTCAGT TGGTTTTTAC ACCAAGTATC GCACTTCATT CTAACACTCC ACCATTTTAC 300
 AAATGAGATT TCTCGAG 317

(2) INFORMATION FOR SEQ ID NO:387:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 234 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:387:

GAATTCGGCC TTCATGGCCT AGGTCAGGTT AGTCAGCTAA TGGATAAGAG ACTTGAAATT 60
 ACTCTTTTGG GATTAGCAAA TAGAAGGGAA AAACATGATA AGGGCACAGA GCGGTGGGTC 120
 TGGGGGAAAA AGCAGAGGCA CAGTTTGAAA AAAATGTGTA AGAGACTGAC TAGGTAAGAT 180
 ATGGTCACAG TTCATAAGTC CTTTGAATTC TAGGATTAAA AAGGTGAACT CGAG 234

(2) INFORMATION FOR SEQ ID NO:388:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 294 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:388:

GAATTCGGCC TTCATGGCCT ACTAGATAAG TGTCAATTCC ATCTGCTTCT GATTTCACAC 60
 GTCAGTGGCC TGGTCCACAC ACTGTGATCT TCTGCCCCCA TCTGAGTGCC GCATACTCAG 120
 CCTTGTCCCT GCATCAGACC CCGGCCACAG ACAGTAACGA GAATGGGCTT CCTAAACACA 180
 AATCTGATT GTTCCGCCTT CCACTTCCTA GTGGCTTCAT TCTCGTGCC TCACTCAGGG 240
 CCCTCACACA TGCTGTTCCC TGCACCTCCG ACACCCTTCC CAGCGCCCCT CGAG 294

(2) INFORMATION FOR SEQ ID NO:389:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 215 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:389:

GAATTCGGCC TTCATGGCCT AAGCAAAGCT AAGTGTAATA CTAAAAGCA GTTTGTTGCA 60
 ACTGGTCATA AAAGTGATTA AATCTAAAGC TGGCATTAAAT AAGGAAGCAA GGTAATAAAA 120
 CAAAAATATA AACAGCTTTG AGAAAGTACA CCTAATAACA AAATCTTGTA ACACAACAAA 180
 TGAAAATCAC AAAAAATATA AGGAGACTCC TCGAG 215

(2) INFORMATION FOR SEQ ID NO:390:

- (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 477 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:390:

GAATTCGGCC	TTCATGGCCT	AGAAAAACAC	TATAGTCACG	CAAGTAATGA	CCCTTCTTAT	60
CCTCAACCCC	CAGCATATAT	GCACAAGGAC	AAACAGTATA	CATACAATCT	CACCTGAGAG	120
ACGTCCTCAG	ACTTGTGTTG	AAACCTTATC	ATGCTGCATT	ATCTCCCTTA	CAACATCCTT	180
CCTGCCTTGT	TTCTCATTTT	CACACTATAC	GGAGTAAAAA	AATATACAAT	TTCTATATAT	240
TATATATATA	ACCTCCATAT	ATTTTATACT	ATTTTCATAT	TTTATACTAT	CAGATTAATG	300
TTTTATATT	TATCTATCAT	TTTAAATATG	CTATGTAAAG	CATCTACAAA	ATTGGTCACC	360
ATTCCTATGG	GAAGTATCTG	CAGAACTCTA	GAAATGAATT	CATCTTTTGC	TTACCCCTCC	420
CTTTTTGAGG	GGACAGGGAC	TTTCTTCTTT	TCCCTCATCT	TCATCTTCCC	CCTCGAG	477

(2) INFORMATION FOR SEQ ID NO:391:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 247 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:391:

GAATTCGGCC	TTCATGGCCT	AGTTAGTCAG	AGTGAAATAT	TCAATAATGA	GTGGTGCAGC	60
CTTGGGACTT	GAGATTGTTT	TTGTCTTTT	TCTGGCATT	TTTCTGCTTC	ATCGATATGG	120
AGACTTTAAG	AAACAGCATA	GACTTGTGAT	TATTGGAACA	CTGCTTGCTT	GGTATCTCTG	180
CTTTCTTATT	GTCTTCATAC	TGCCTCTGGA	TGTTAGTACG	ACAATATACA	ACCGGTGCAA	240
GCTCGAG						247

(2) INFORMATION FOR SEQ ID NO:392:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 366 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:392:

GAATTCGGCC	AAAGAGGCCT	AGTCATCTGC	ATTTATTATG	AGCAGCAGGT	GGGACACTTC	60
CAGCAACAGT	AAAAAAAAGT	AATTTACAAA	AGCAGGTTTC	AGTGAAGCCA	TCTGGTTGTT	120
ACCCTTGGGT	GCTCACACGT	AGATGCCAAC	CCAGAGCAGC	AGGAAGAGGA	CTCCAAAGCC	180
CATGAAGAGT	GAGGCCACTA	AGGAGATGAG	GAGCTCTTTA	TAGATATCAC	GAGTGTACTT	240
GGTAGAGGTG	ACCTCGTAAA	CGAAGAACCA	GGCGGTGAAG	AACATGCCAA	TGGCCAAAAG	300
CACCACGGTC	AGATGGGGGA	AGACAGCTGG	GTTCACTGGG	CTGGTATATC	TGCTCATGGC	360
CTCGAG						366

(2) INFORMATION FOR SEQ ID NO:393:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 205 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:393:

GAATTCGGCC AAAGAGGCCT ACCCTGGGTT AACATTCAAG ATGGTACATG CTGAAGCCTT	60
TTCTCGTCCT TTGAGTCGGA ATGAAGTTGT TGGTTTAATT TTCCGTTTGA CAATATTG	120
TGCAGTGACA TACTTTACTA TCAAATGGAT GGTAGATGCA ATTGATCCAA CCAGAAAGCA	180
AAAAGTAGAA GCTCAAAAC TCGAG	205

(2) INFORMATION FOR SEQ ID NO:394:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 387 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:394:

GAATTCTAGA CCTGCCTCGA GCCGGAGATG GANAAGAAAG TCAGCCTACT CAAGGACAAT	60
AGCTCTCTGG AATTTGACTC TGAGATGGTG GAGATGGCTC AGAAGTTGGG AGCTGCTCTC	120
CAGGTTGGGG AGGCACTGGT CTGGACCAAA CCAGTTAAAG ATCCCAAATC AAAGCACCAG	180
ACCACTTCAA CCAGCAAACC TGCCAGTTTC CAGCAGCCTC TGGGCTCTAA TCAAGCTCTA	240
GGACAGGCAA TGTCTTCAGC AGCTGCATAC AGGACGCTCC CCTCAGGTGC TGGAGGAACA	300
TCCCAGTTCA CAAAGCCCCC ATCTCTTCCT CTGGAGCCAG AGCCTGCGGT GGAATCAAGT	360
CCAACTGAAA CATCAGAACT TCTCGAG	387

(2) INFORMATION FOR SEQ ID NO:395:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 553 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:395:

GAATTCGGCC AAAGAGGCCT ATCGAGAAGC CTTGTTTATT TAATGTGAGT TTGTGCCTTT	60
TTGTCTCAAT CTCCAATAC AGGTATATTG AGAAAAAAG CAGTCTAATA AAATCCTAGA	120
CAGAACTTTC TGGAGTCCAG TTTGGTGATG TCCATTTTCC AGCTGTATGT ATCCTCAAAC	180
TTGCACTGAT AACCGCCATT TTACCAGGGC AGGATTAGGA AGAGGTACAA AGGTGTGTCT	240
GAAAAATTTT GCACGTGGAT TTCTGCATAT AATAGTCCCG TGTCAGTTTA CTTATGCAAA	300
CATTGCACAT CTGAATTGTA ATTCCGCCGT TTCCTACTGA CAGGATGTCC TTTTGCTTTT	360
GTCTGCCTCC TCTTCACATC TTCCTCTTTA TCCACCCTGC AGCCGGGGGG CGGGGGAGAC	420
CGGATCCCAG GCAGGACAGT GGCTAGGCTG CGTGTCCCCA CCCCCGACCC TCGTTTGACC	480
CCTGGGAGCC GGGGCGAAGA CAGCACAAGG ACGGAGCCCT CGGATCCCTC ACGAGTGGGG	540
CAGAGGCTGC GGG	553

(2) INFORMATION FOR SEQ ID NO:396:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 472 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:396:

GAATTCGGCC	AAAGAGGCCT	ACAAGGTTAC	TTGACCAAGA	TGGTGACATT	GTAAGATTTG	60
AACAAAGGAA	ATGTGACTTC	AGAGTCATGG	TTGTTAACTA	TGCTATGAAG	TAGGAAAAC	120
TTATGAGGTC	TTTTTAACTC	AAACAGTCGA	GTTTTAAGTT	GAGGGTTAGC	AATGATGAAT	180
GAGTGGCCAA	AAAATGTATT	CATATTTTAA	GTCTTTCTTA	GAATTACTGG	TAGTTGTGCA	240
CAACTAGAGG	GTATTTATTT	GTGTGTGTAT	GTGTCGTGTG	TGTACGAGTG	CTGGAAATAC	300
TCTGCCAGTT	TACAGTAGAG	GCAGGCTTAC	ATAATTCAGT	CATGAAAGCT	GAGGCTTATA	360
GTTTAGAGGG	GATCGTCCTC	TTCTTAATGA	GTCTGTAAGT	TACAAAAATA	ACTTTTTTCT	420
TTATTTACTA	ACTGGTTGGT	TTTAATATT	AAAATATTAG	GTGCTTCTCG	AG	472

(2) INFORMATION FOR SEQ ID NO:397:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 548 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:397:

GAATTCGGCC	AAAGAGGCCT	AGATTGGGGG	ACATTCTTCT	TTAGAAGGAA	AAGAGTCTAA	60
TTAGTGGATA	TTAAGTAATT	AAATAATACA	TACTATCAAA	TATTATGAGA	GTCACATGAA	120
CCATGAAGTC	TTCACTTAAT	TTAGGAGAAA	TGGGGAATAT	TTTCTATCAT	TCCTGATAAC	180
AGAACTAGAT	ATTCAAGAT	CATAGTCATG	GAATGTAATC	CATAATACCA	AACAGGGTGC	240
TTTACTTTGA	AGCCATTGAC	CATTAAATTT	GATTGTTAGT	AGCACAGGCT	ACCAAAAAAT	300
AGCAAGGAAT	ATGGTATCCA	CACAGATCTC	GGCTGGCCTC	AAGTAATCAA	AAGTGAGAAT	360
GAAACATACA	TGACACAAC	GGGGACCTCT	GGGTTTCTGA	GACGTGGGCT	ACAAGATTAT	420
ATTAGGTAGA	AAACTAAAGG	AAATGTATTC	CAAGCAAAAG	TGGCAAGGGA	ATTTACACGA	480
ACTAATTTT	TAAGGGAGGT	AATAAAAGCA	GCAGTTAAAA	TGCATGTCCA	TGTATCAGAT	540
TCCTGGAG						548

(2) INFORMATION FOR SEQ ID NO:398:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 462 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:398:

GAATTCGGCC	AAAGAGGCCT	AGGCTAAATA	CCGGCACGAG	ACCGATTTTC	TGAAGACAGC	60
AGATTATATCA	CTGTTAATCC	AGCGGAAAAA	AACACCTCTG	GAATGATAAG	CCGCCCTGCT	120
CCAGGGAGGA	TGGAGTGGAT	CATCCCTCTG	ATTGTGGTAT	CAGCCTTGAC	CTTCGTGTGC	180
CTCATCCACT	TCTCAAAC	GGAGAACTGC	AAGGAGCTGC	AGCTGGAGAA	GCACAAGGGC	240
GAGATCCTGG	GCGTGGTGGT	GGTGGAGTCG	GGCTGGGGCT	CCATCCTGCC	CACGGTGATC	300

CTGGCCAACA TGATGAATGG CGGCCCGGCT GCCCCTCGG GGAAGCTGAG CATCGGGGAC	360
CAGATCATGT CCATCAATGG CACCAGCCTG GTGGGGCTGC CCCTCGCCAC CTGCCAAGGC	420
ATCATCAAGG GCCTGAAGAA CCAGACACAG GTAAAGCTCG AG	462

(2) INFORMATION FOR SEQ ID NO:399:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 428 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:399:

GAATTCGGCC AAAGAGGCCT AGGCCGGGCA CACAGAAAAA TGCGAGGAAT AGAAATGCTT	60
GCATACTCTT GATTTTT TTTT TTTTGT GTGTAAAAA CACACCCTCC CCTCCCACCC	120
CAAAAAACAT CAAATTCCTT CCTTTTCCCC AAATCCCTGG ATCTTGGAAT GAAAGCCACC	180
CTTCCCCAAT CTGTCCTCAC CTCCTTCAGC CCATCCAAGT TATGCACAAA AAAACAAAAA	240
TTAGTGAGAA ATTTGGGGAT TTGCACAACA AAAAATTAGA TAATGTTTTC CAAAAC TAGG	300
TCTTCTATGC TGTGTCAAAA AAAGTTTCCT ACAGACTGAG GATATTCACA CGACAGGAGC	360
CTGGGGGTTA AATGAGCCTT TATTAGAATG TTGTAGCAGT TGTGTTTGA GCGGGTGGCC	420
CTACAAAA	428

(2) INFORMATION FOR SEQ ID NO:400:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 269 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:400:

GAATTCGGCC TTCATGGCCT AAGTTGAAAC TTACGAGTAA CATACTGGT GTCTGATTGG	60
TTGTCACTACT TTTCATTTTC CTCCTTTCA GATCCAATCC ATTCTACACA TTACTGAT	120
TTTTTCCTAG TGTACTGATT TCTGTTATGT CACTTTGCTG CTTAGGCTTC TTAATGCTTA	180
CTGTATCAGG TGTAACACC TTTTGCTTAC CTTTCAGGC CTTTTTAGAG TCTTATATAG	240
CTTACTCCA TGCTCCAACCT CCCCTCGAG	269

(2) INFORMATION FOR SEQ ID NO:401:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 236 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:401:

GAATTCGGCC TTCATGGCCT AGGCACTTTG AAGAGATATA GAACTCCGTG TATCACATTT	60
TCCATTTTTA TTTCAATTTT TAATTGCCCA GAGCCTAATT TCTGTGGGCC TCTGCTGATT	120
TGCACATTTG AGATTCGTGT GTAAATATGC GTGTGGCATG TGTACACGCC TGGGCCTCCT	180
TATCACAAAG TGTGCTCTCT CAGTGTTTAA ATACACACAA TCCACATCGA CTCGAG	236

(2) INFORMATION FOR SEQ ID NO:402:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 292 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:402:

GAATTACCTT ATACACATAG CCTGAAGGTA ATTTTATACA ATATTTCCTAA TAGTTTTGTG	60
CTTCAAACAA AGTTTGGGTA CATTGAACCA TCAGAAAGGA AAGGTGTCAT TGTCTCAGCC	120
ACCCATGTGG ACAATCTCTG GTTGTGTTGC ATCACTGTTG TTGCTGAGTC TGAATGTGAG	180
GAACATGCCA TTGGCATGTC TTGCCCACAC ACACACCATT TTGTTATCTT TTGTGGGTGT	240
GCTTATGTGG GGAATCTGG GCGTGTGTGA AAAAAATATA TTGCAGCTCG AG	292

(2) INFORMATION FOR SEQ ID NO:403:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 345 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:403:

GAATTCGGCC TTCATGGCCT ACTTGGGGTA CTGAGATACA TGGGGCCGAA AAGGGGTAAT	60
ATGGCCATCT TTTATCAGAA AAAGTGACAA AACGGGAATT TAAAAAATGA ATTTTCATC	120
TGACTTTATT TCCAAATACA CTTTCTTTT TAAAAACCA ATACACTTC TTTGAGGATG	180
ACAGTATTAG GAAATCCAAT TATACAAAAA ATACTACATC TAGTCTGGGG TAGATATATT	240
TATTTTGGT AACATACATT AAGTGGCACT AATTACACAG TAACTATAAG GTAACATAA	300
TGAAACCACA GAACTGTAAC TCTGCCACAG CTGCATGAAC TCGAG	345

(2) INFORMATION FOR SEQ ID NO:404:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 252 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:404:

GAATTCGGCC TTCATGGCCT AAAAAAAAAA AAGCCATTAA TCTAATTAAT TGTTTAATCC	60
TGCTTACAAG ATTATCTTGA AAAAATGTGC TGGGGAGTAT GGTATAATGA ATTACGGGTC	120
CAAGAATTG GGTTCAGATA CCACCTTCAG TCTTTACTAA GCTGCGTGAC TTTAGCAAAG	180
TGCTTAGTCT CTCTAAGCTT CGGTTTCCTA ATCTATGAGG AGGGCCTAAG ATATCACCAC	240
CCATCACTCG AG	252

(2) INFORMATION FOR SEQ ID NO:405:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 305 base pairs

(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:405:

GAATTCGGCC	TTCATGGCCT	AAGAATACGA	AATTTGAGAG	GATGAATTTG	ACCTTTAATA	60
TTGTTGGACT	TTGTATTGGA	TATCTTTCCT	CCATCACTTC	AAAATCGTCT	TGCTTGGCCT	120
CTTATTGCAA	CCACAGCTGC	AGTAGACAGT	TCCATACAAG	CTTCCAAGAA	CTTCATGGGT	180
ACATCTGGAG	AGCACCTCAC	CTGGGGCCAC	ATTCTCTACC	TTTCTGTCT	TACTCTTCCT	240
CCTCTGGGCT	TCTTTCTGGT	GCATGGGGGT	GGGGGGAGAT	ATTAAGTATT	CCCCAACAGC	300
TCGAG						305

(2) INFORMATION FOR SEQ ID NO:406:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 250 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:406:

GAATTCGGCC	TTCATGGCCT	ACACAGCAAC	AACCAACATA	GCTAATACAG	AAAGCAGTCA	60
GCAGACTCTA	CAGAATTCCC	AGTTTCTTTT	AACAAGGTTG	AATGATCCTA	AAATGTCTGA	120
AACGGAGCGC	CAGTCCATGG	AAAGCGAGCG	TGCAGACCGC	AGCCTGTTTG	TCCAAGAGCT	180
CCTTCTGTCC	ACTTTAGTGC	GTGAAGAGAG	CTCATCCTCA	GATGAGGATG	ATCGGGGGGA	240
GGTTCTCGAG						250

(2) INFORMATION FOR SEQ ID NO:407:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 481 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:407:

GAATTCGGCC	TTCATGGCCT	AAAAGAAACT	AGGTGTGATT	GGAAGGAAGA	ATCATGAAAG	60
ATCAGGGTAG	ATACTGGTGG	GGCAGCTATT	AAAGGAGTTT	GAGCAGGGGC	ATGACATCTT	120
CACATTGAAA	GCAATATGGG	AGTCGAATTA	AATTTAGTAC	CCAGTTGAGA	TAAAAGTCCA	180
TTGCCATATT	CACAGTGAGG	TGGGACAAAA	GCAGAGTCAG	AGAGATTAAG	AGGCTGGGAA	240
AGATTGAAGT	GATTTTtagg	AATCAGAATC	CACATCAGTT	GATGACAAGT	ACAGAAGGGC	300
ACAATAGCAA	GAAGAAGAAG	TAAATGATAA	TTCTAGATG	CCATTAGTCA	CAATCAAGTA	360
CGGAAGAGAC	ATTATTGACT	GAGGTTGAAT	CAGGGCAGAG	AAGATAATAT	ACCTGATTTT	420
GGAAGTGTTG	CATGTAAGGG	GGCTTCGATT	TCAGCTACTT	ACATACTTGG	GAAGTCTCGA	480
G						481

(2) INFORMATION FOR SEQ ID NO:408:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 308 base pairs

- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:408:

GAATTCGGCT TCATGGCCTA CCCGGCAATT GGCTGATCCG CAGAAACATT TCTGGGCTTC	60
TTTCCATAT CTCTGGAAC TATAGTCAAA CGTTAACTCT GAGCCTGAAG GAACCAAGTTT	120
GGTGGTAAAA AACCCAACCC TCAGTTGTCC GTTCACAGTC CATTTTGGG TTTCACAATT	180
TGGTTCACAG CTGTGATTCA TGAAACGAGA GCAATTTCTT TTTTGAGTGG CATCTATTAT	240
CTCATCATT TCAGGGCCA TGAAATAGTA ATGGATGTTT TTGTTTCGTG CATACTCCTT	300
CATCTCGAG	308

(2) INFORMATION FOR SEQ ID NO:409:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 337 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:409:

GAATTCGGCC TTCATGGCCT ACAATGAGGA TAATACAAAA GAGCAATCTG CCCCACTGTG	60
AGCCTGAGCT TCCCATACTG ACTTCTCTCT CTCCAGAGGG ATCCACTCCT ACCAGTCTGG	120
AAAGCACTGG GCATACAAGC GCACAAATGC GTGGCACATA CTACAAATCC TTCTAAAGCC	180
ACTGCTGTAC ACCTGCCTCA CTTAACCATG CAGCCTCAAG GCTGTCTCAT GTCATTCTTT	240
CCTACAGCTG CAGAGTTTTC AACATATGGA CAGGTGTGCC AGGATTTATT TGACTAGTCT	300
CTTACTGATC TAGCTCACCT CCTAAATACA ACTCGAG	337

(2) INFORMATION FOR SEQ ID NO:410:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 315 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:410:

GAATTCGGCC TTCATGGCCT AAAATGTGGG GATTGGGAAC CACTAGTTCT TTCAGATGGT	60
ATTCTTCAGA CTATAGAAGG AGCTTCCAGT TGAATTCACC AGTGGACAAA ATGAGGAAAA	120
CAGGTGAACA AGCTTTTCT GTATTACAT ACAAAGTCAG ATCAGTTATG GGACAATAGT	180
ATTGAATAGA TTTCAGCTTT ATGCTGGAGT AACTGGCATG TGAGCAAAC GTGTTGGCGT	240
GGGGTGGAG GGGTGAGGTG GCGCTAAGC CTTTTTTTAA GATTTTTCAG GTACCCCTCA	300
CTAAAGGCAC TCGAG	315

(2) INFORMATION FOR SEQ ID NO:411:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 277 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double

(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:411:

GAATTCGGCC	TTCATGGCCT	ACCTGAACCC	CTTACTTCGA	AGGATCATAA	GATTCACAGG	60
GGTGTGTTGCA	TTTGGACTTT	TTGCTACTGA	CATTTTGTGA	AACGCCGGAC	AAGTGGTCAC	120
TGGGCACTTA	ACGCCATACT	TCCTGACTGT	GTGCAAGCCA	AACTACACCA	GTGCAGACTG	180
CCAAGCGCAC	CACCAAGTTTA	TAAACAATGG	GAACATTTGT	ACTGGGGACC	TGGAAGTGAT	240
AGAAAAGGCT	CGGAGATCCT	TTCCCTCCAA	ACTCGAG			277

(2) INFORMATION FOR SEQ ID NO:412:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 316 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:412:

GAATTCGGCC	TCATGGCCTA	GTGGTAGGGC	TGAATTCGCA	CTATAGGGTT	AGATTTTCTA	60
CTGTAGGGTT	AGATTTTTTTT	AATGGTGTGT	ATATAATAAT	ATAATATTAA	TAATAATCGG	120
AGAGGGTCAA	AGAGGAGGGA	AACTGGGTAA	CCCAAAAACA	TAAGGTCGAG	GTCCCTGTTC	180
TTCACCGGAA	AGAGGGTCAA	GGACCAAAGC	CATAGATTGT	ACTGGTAGTT	TAGTTTAGTC	240
CTGTCTACGA	AGAAGAAGAG	CGGTTGTTTG	TTTAAACAGA	TTCAAGAGCA	GGAAGCACTC	300
ATTTAGATAA	CTCGAG					316

(2) INFORMATION FOR SEQ ID NO:413:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 249 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:413:

GAATTCTAGA	CCTGCCTCGA	GTCAGGCTTT	TAAAAACAAT	CTCATCTGTC	CCTCTAAAAA	60
TTAGCTTCCT	TTAGAACCTC	TTCTCCTTGG	CAATATATTA	GTGATACTAT	TGTTATCTTC	120
ACACTAAAGA	TTCAAACTT	TAGTTTTTGT	TTTAGGAAAG	TTTTTTATTT	TTACATTTCT	180
TTATCCTTTC	ATAATTACCC	AGTCATCATG	AACTTTGTAG	TTATCTATTT	CTTCATAGGA	240
ATCCTCGAG						249

(2) INFORMATION FOR SEQ ID NO:414:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 350 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:414:

GAATTGATAC	TAGGGACCGA	AGGGAACTAA	GAGACTCCAG	AGACATGCGG	GACTCAAGGG	60
AGATGAGAGA	TTATAGCAGA	GATACCAAAG	AGAGCCGTGA	TCCCAGAGAT	TCTCGGTCCA	120
CTCGTGATGC	CCATGACTAC	AGGGACCGTG	AAGGTCGAGA	TACTCATCGA	AAGGAGGATA	180
CATATCCAGA	AGAATCCCGG	AGTTATGGCC	GAAACCATT	GAGAGAAGAA	AGTTCTCGTA	240
CGGAAATAAG	GAATGAGTCC	AGAAATGAGT	CTCGAAGTGA	AATTAGAAAT	GACCGAATGG	300
GCCGAAGTAG	GGGGAGGGTT	CCTGAGTTAC	CTGAAAAGGG	TAGGCTCGAG		350

(2) INFORMATION FOR SEQ ID NO:415:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 529 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:415:

GAATTCGGCC	TTCATGGCGT	TAAAACTGTG	CCTAACAGAG	GTGTCCTCTG	ACTTTTCTTC	60
TGCAAGCTCC	ATGTTTTCAC	ATCTTCCCTT	TGACTGTGTC	CTGCTGCTGC	TGCTGCTACT	120
ACTTACAAGG	TCCTCAGAAG	TGGAATACAG	AGCGGAGGTC	GGTCAGAATG	CCTATCTGCC	180
CTGCTTCTAC	ACCCAGCCG	CCCCAGGGAA	CCTCGTGCCC	GTCTGCTGGG	GCAAAGGAGC	240
CTGTCTGTG	TTGAATGTG	GCAACGTGGT	GCTCAGGACT	GATGAAAGGG	ATGTGAATTA	300
TTGGACATCC	AGATACTGGC	TAAATGGGGA	TTTCCGCAAA	GGAGATGTGT	CCCTGACCAT	360
AGAGAATGTG	ACTCTAGCAG	ACAGTGGGAT	CTACTGCTGC	CGGATCCAAA	TCCCAGGCAT	420
AATGAATGAT	GAAAAATTTA	ACCTGAAGTT	GGTCATCAAA	CCAGCCAAGG	TCACCCCTGC	480
ACCGACTCTG	CAGAGAGACT	TCACTGCAGC	CTTTCCAAGG	ATGCTCGAG		529

(2) INFORMATION FOR SEQ ID NO:416:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 363 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:416:

GAATTCGGCC	TTCATGGCCT	ACTGAGCCTA	GTAATTCAAG	GCTGCAGTGA	GCTGCGATCA	60
CATCACTGCA	TTCCCGCCTG	GGCAACAGAA	GTAGACTCCA	TCTCTAAAA	GAAGGAAAGA	120
AAAAAAGGAA	GAAATATACA	GTAATTTTAA	ACTGGGAGAT	GAAATGCTAA	TTTCTAGAAG	180
TCCATTTGGT	TTTGAAGGGT	CTCATGTCAA	AAAAAAAAAA	AAGTAAGTAA	AATAAGACCC	240
ATCCTACTGT	TTTATATACT	AAAATAGTAA	GTTAATTAAA	TGAAAATGAA	GTACATTGG	300
GCTTTTCAATT	ACCAATCCTG	GAATGTTGAA	AAGTTGCCCA	AAAGACATTT	AGCAAGACTC	360
GAG						363

(2) INFORMATION FOR SEQ ID NO:417:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 129 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:417:

GAATTCGGCC TTCATGGCCT ACCTGAAAGC CCATCTCCTC CAACTTGCAG CGCCGGTAGA	60
GCTCGTAGTG CCGGCTGTGG GTCTGCTCGC GGAGGTCTTC CATGTTCAAC CGGATCAACC	120
TGCCTCGAG	129

(2) INFORMATION FOR SEQ ID NO:418:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 284 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:418:

GAATTCGGCC TTCATGGCCT AGGAGGTGGG TATAGGGAAC ACTTGGGGAG AAATAGTGAA	60
ATCTGAATAT AGACTGTGCA TTGTATCATT TAGTATAAAT GTTGACTTGC CTGATTGTGT	120
TGTTGAAGGC ACTGTGGTTA CACAAGAGAA CGTCTGTCTT CCTAAGTGAT GCATGCCAAG	180
GTTTGCAGGG GCATCCTGTC TGCAATTACT CTCAAATAGA TCAAAATAAT AATAACGTGT	240
GTGTGCATGA TGGAGACAGG GAAGAAGAAA GGAAAGGGCT CGAG	284

(2) INFORMATION FOR SEQ ID NO:419:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 292 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:419:

GCCAGCACAT TGTGGAACAG AAAAATGGCA AAGAAAGAGT GCCATCCTC TGGCATTTC	60
TGCAGAAGGA AGCAGAGCTG AGGCTGGTAA AGTTCCTGCC TGAGATTTTG GCCTTGCAAA	120
GGGATCTAGT GAAGCAGTTC CAGAACGTCC AGCAAGTTGA ATACAGCTCC ATCAGAGGCT	180
TCCTCAGCAA GCACAGCTCA GATGGGTGA GGCAGCTGCT TCACAACAGG ATCACAGTCT	240
TTCTGTCCAC ATGGAACAAA CTGAGGAGAT CGCTTGAGAC GAACAGCTCG AG	292

(2) INFORMATION FOR SEQ ID NO:420:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 304 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:420:

GGAACCAACA GAACAACCTG TGAGGAAGAA CAAAATGGCC TCTAATATCT TTGGGACACC	60
TGAAGAAAAT CAAGCTTCTT GGGCCAAGTC AGCAGGTGCC AAGTCTAGTG GTGGCAGGGA	120

AGACTTGGAG TCATCTGGAC TGCAGAGAAG GAACTCCTCT GAAGCAAGCT CCGGAGACTT	180
CTTAGATCTG AAGGGAGAAG GTGATATTCA TGAATATGTG GACACAGACT TGCCAGGCAG	240
CCTGGGGCAG AGTGAAGAGA AGCCCGTGCC TGCTGCGCCT GTGCCAGCC CCGTGGCGCT	300
CGAG	304

(2) INFORMATION FOR SEQ ID NO:421:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 256 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:421:

TAATTTAGAT TATACAGAAC TTGGCCTGCA GAACTGAAG GAGTCTGGAA AGCAGCACGG	60
CTTTGCCTCT TTCTCTGATT ATTATTATAA GTGGTCCTCG GCGGATTCTT GTAACATGAG	120
TGGATTGATT ACCATCGTGG TACTCCTTGG GATCGCCTTT GTAGTCTATA AGCTGTTCTT	180
GAGTGACGGG CAGTATTCTC CTCCACCGTA CTCTGAGTAT CCTCCATTTT CCCACCGTTA	240
CCAGAGACAA CTCGAG	256

(2) INFORMATION FOR SEQ ID NO:422:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 216 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:422:

GCGATTGAAA TGGATCCTCC AGCTCTTCCA CCAAAGCCAC CTAAGCCAAT GACTTCAGCA	60
GTTCCAAATG GAATGAAGGA CAGTTCTGTT TCTCTTCAGG ATGCAGAATG GTACTGGGGG	120
GATATTTCAA GGGAGGAGGT AAATGACAAA TTGCGGGATA TGCCAGATGG GACCTTCTTG	180
GTCCGAGATG CCTCAACAAA AATGCAGAGA CTCGAG	216

(2) INFORMATION FOR SEQ ID NO:423:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 389 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:423:

GAATTCGGCC TTCATGGCCT AAAATTAATG AGTTGAACCT GTGACCACTG CATTCAAGAA	60
GAGTCACCCA AGAGAGAGGT GGGGAGTCGA ACAGAGCTCC TTTACTTTCT CCCACAGAGG	120
AAAAGGTGGA ATTCTGGGCT GGCTTTCCCT CACCAGAGGG TATCCCAAAT CTATGACAAA	180
AGAAAAATGC CAGTCTCTTT TGGAAAGTAG GGAATGCCCT AGTGATGCTG TATGAAGAAG	240
CAAGCCTCCA TCTTCCCCGG GGAAATTTGA AACCAAGATG GGGTCCTGTC AATGACCTC	300
TAGCATTTAT TGAGTGCCTA TTAGACAGGT GGCCTTGGGC TTTGAAATGC AATATCTTAT	360
TTAACTTAAT TCTGAGAACG TATCTCGAG	389

(2) INFORMATION FOR SEQ ID NO:424:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 411 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:424:

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GCCCCGTGCTG ATGTCTTTGA AAGAAGGCTA TAAGAAGTCC TCAAAAATGG TATTTAAGGC      60
TCCCATCAAA  GAAAAGAAGA GTGTTGTGGT CAACGGAATA GATTATTAG AAAATGTCCC      120
ACCCAGGACA  GAGAATGAGC TCCTTCGAAT GTTCTTCCGG CAGCAGGATG AGATTGACG      180
GTTGAAAGAG  GAGCTGGCCC AGAAGGACAT CCGCATTCCG CAGCTCCAGC TGGAACTGAA      240
AAACTTGCGC  AACAGCCCCA AGAACTGTTA GCTCCCCAGC TGGGCTGTTT TCTAAGCCGA      300
TCTCTCCGTC  GTTCTACTC ATCCCTTAAC TTCTCCCTTA CCAGTGACCC CAGAGACAGA      360
GCCAGGACAG  GAGTGGGGGC CAGCCTGAGG ACCCCGCTT ACCACCTCGA G      411

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(2) INFORMATION FOR SEQ ID NO:425:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 691 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:425:

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GGTACCAACA GGACACCCCG GTGGCCCCC GCTTTGACGT CAATGCCCCG GACCTCTACA      60
TTCCAGCAAT GGCTTTCATC ACCTACGTTT TGGTGGCTGG TCTTGCGCTG GGGACCCAGG      120
ATAGGTTTCT CCCAGACCTC CTGGGGCTGC AAGCGAGCTC AGCCCTGGCC TGGCTGACCC      180
TGGAGGTGCT GGCCATCCTG CTCAGCCTCT ATCTGGTCAC TGTC AACACC GACCTCACCA      240
CCATCGACCT GGTGGCCTTC TTGGGCTACA AATATGTCGG GATGATTGGC GGGGTCCTCA      300
TGGGCCTGCT CTTCGGGAAG ATTGGCTACT ACCTGGTGCT GGGCTGGTGC TGGCTGGCCA      360
TCTTTGTGTT CATGATCCGG ACGCTGCGGC TGAAGATCTT GGCAGACGCA GCAGCTGAGG      420
GGGTCCCGGT GCGTGGGGCC CGGAACCAGC TGC GCATGTA CCTGACCATG GCGGTGGCGG      480
CGGCGCAGCC TATGCTCATG TACTGGCTCA CCTTCCACCT GGTGCGGTGA GCGCGCCCGC      540
TGAACCTCCC GCTGCTGCTG CTGCTGCTGG GGGCCACTGT GGCCGCGGAA CTNATCTCCT      600
GCCTGCAGGC CCCAAGGTCC ACCCTGTCTG GCCACAGGCA CCGCCTCCAT CCCATGTCCC      660
GCCCAGCCCC GCCCCAACC CAAGGCTCGA G      691

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(2) INFORMATION FOR SEQ ID NO:426:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 321 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:426:

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GCAGACCATA TATCGAAAGT TCTTTACTTG TATCAAGGTG AGAAAAAATT AGAAGAGATA      60
TTACCTCTGG GACCAAACAA AGCTCTTTTT TATAAAGGAA TGGCATCATA TCTTTTACCA      120

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GGACAAAAAT CTCCATGGTT TTTCCAAAAA CCCAAAGGTG TAATAACTTT GGACAAACAA	180
GTAATATCCA CGAGTTCAGA CGCCGAATCC AGGGAAGAAG TTCCCATGTG TTCAGATGCT	240
GAATCCAGGC AAGAAGTTCC CATGTGTACA GGCCCTGAAT CCAGGCCAGA AGTTCCCGTG	300
TATACAGATT CTGAACTCGA G	321

(2) INFORMATION FOR SEQ ID NO:427:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 190 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:427:

GAATTCGGCC TTCATGGCCT ATATACTATC AAATGAAAAT AGCAAGATGC TACCATTTAT	60
ATTAAAAAGA GGACAAAATA TTAATATATT CATGGTTGCT TGTCTATGTG GAATATTTCT	120
GGATATATAC ATAAGAAGTT ACATTGGTTA CCTATGGGCA GGTTACTACT GGGTGGCAGG	180
TGGGCTCGAG	190

(2) INFORMATION FOR SEQ ID NO:428:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 670 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:428:

GAATTCGGCC TTCATGGCCT AGGCAAAGCT GGCCCTGACG CCTGGGTTTC TTGGCCCCAG	60
CTGCCCAGCA GGTGCCTCGA TTCCCTGCCC TTGTGACCTC CCAGGAAACA GAACTGATCT	120
GGGACACTAT GTCACCTCTC CTCTCATCTG GGGTCAGTCA GGGTTCGGGG GCTGCAGCAG	180
CCAAGCGCAT GAGAGGTGTT TCCTTGGCCT TCCAGAAGGC CCACTGTGGA GCCAGCCTCC	240
CTATGGGAGG CAGAGCGGCA AGGACAGGGC TTTGGAATCA GCCAGGTCGG CTCCTGGGCT	300
GTGGCCGTGG AGAAACACTG CCCCAGGAT GACACAGGCA AGAGCCCCTG AGGCATGGGA	360
GGCCCAGGGA AGACCATGGG CTGTAGGGGA GAGTGTGGCA GGTGACCCAA AGGCCAAAG	420
AGGGCCGTGG GGCCTGAGGA GGTCATAATC TCTTCTGAGT GGGGGCAGGT CGATTCTTGC	480
ACAAGGTGGG CTCTTCACTG AGCCATAAGG GACAGGGAGG TATGGGAGAG CGCTGGGGGC	540
CCATCCCCCT GTCCACCCAG TGTCCACTGG CCTGTCTTC AGGGAGCAGA GCAGAGCAGG	600
TGGTGGACGG GCCCAGTGCT GGGTGTTC ACCACCATCC CCCCATCCCC CATCTAAGTC	660
GTCCTCGAG	670

(2) INFORMATION FOR SEQ ID NO:429:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 278 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:429:

GTAAGGATTG GCGATTCTTA CAGCGAATGA TCACCGCTCC CTGCATCCTC TTCCTGTTTT	60
ATGGCTGGCC TGGTTTGTTT CTGGAGTCCG CACGGTGGCT GATAGTGAAG CGGCAGATTG	120
AGGAGGCTCA GTCTGTGCTG AGGATCCTGG CTGAGCGAAA CCGGCCCCAT GGGCAGATGC	180
TGGGGGAGGA GGCCAGGAG GCCCTGCAGG ACCTGGAGAA TACCTGCCCT CTCCTGCAA	240
CATCCTCCTT TTCCTTTGCT TCCCTCCCCA ACCTCGAG	278

(2) INFORMATION FOR SEQ ID NO:430:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 299 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:430:

GAATTCGGCC TTCATGGCCT AATTGAATTC TAGACCTGCC TCTGTTTCATC TTAAATGCT	60
GTTTCTCTG TTCAAATGC CCTTCTCTAC CTTATCTACT TGTGCCACTG CATATTCCTA	120
AGGCTCAACT CAGGGTATCT TCCCTCGGAA ACCTTGTCTG ATCATCTCTGG CCCCTCTGGC	180
GGACAGTAAT TTCTGCCTCT GTGCTCCCAT CACCTGAGCA CACCTGTATG GTGCTGCTGA	240
GGCCGCTGAA TTGGCATTAT GGGCACGTGC GTCTCCTCCA TTCCATGGAG CTCCTCGAG	299

(2) INFORMATION FOR SEQ ID NO:431:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 350 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:431:

GTTACATGAC ACTGTTAATG ATTGCATTG GCTTGCTGTG GGGGCATCTC TTGCGGATCA	60
AACCCACGCA GAGCGTCTTC ATTTCCACGT GTCTGTCTT GTCAAGCACA CCCCTCGTGT	120
CCAGGTTCTT CATGGGCAGT GCTCGGGGTG ACAAAGAAGG CGACATTGAC TACAGCACCG	180
TGCTCCTCGG CATGCTGGTG ACGCAGGACG TGCAGCTCGG GCTCTTCATG GCCGTCTATC	240
CGACTCTCAT ACAGGCGGGC GCCAGTGCAT CTTCTAGCAT TGTCGTGGAA GTTCTCCGAA	300
TCTTGGTTTT GATTGGTCAG ATTCTTTTTT CACTAGCGGC GGCTCTCGAG	350

(2) INFORMATION FOR SEQ ID NO:432:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 305 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:432:

GAATTCGGCC TTCATGGCCT ACCAGTTTCT TGCTGCCCTG CGACTCCAGT ATCTGCAGGG	60
GGATTATACT CTGCACGCTG CCATCCCACC TCTCGAAGAG GTTTATTCCC TGCAGAGACT	120
CAAGGCCCGC ATCAGCCAGT CAACCAAAC CTTCAACCCT TGTGAACGGC TGGAGAAGAG	180
GCGGACGAGC TTCCTAGAGG GGACCCTGAG GCGGAGCTTC CGGACAGGAT CCGTGGTCCG	240

GCAGAAGGTC GAGGAGGAGC AGATGCTGGA CATGTGGATT AAGGAAGAAG TCTCCTCTGC
TCGAG

300
305

(2) INFORMATION FOR SEQ ID NO:433:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 273 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:433:

GAATTCGGCC TCATGGCCTA CTCCTCAGCC CCTCATCTTG CCTCCACCCA GCTGCTCCAT	60
TTTTGCCACA TCGTGGCCCG CAGCCCCAGA GTCACTGTCC ATGTCACCAT CCTCCTCCTC	120
CTTTGGAATC CTCTCCGCAC ACTGTGGCCC TTGTCTCAGG GCCACAAGC TGAAGTGTGG	180
CATAGCTCTC TCTTCTTCTC CAAGAAGACT CAGCAGCCTA CATTCCCATT CCTGGTATGT	240
GCCATTGGGT TGGATGTCCC CACTTATCTC GAG	273

(2) INFORMATION FOR SEQ ID NO:434:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 324 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:434:

CGAGTGAGCG GCGGGACAG TGCTTGTAAG ACTGAACACA ACAAAGTAT GGATATGGGA	60
AACCAACATC CTTCTATTAG TAGGCTTCAG GAAATCCAAA AGGAAGTAAA AAGTGTAGAA	120
CAGCAAGTTA TCGGCTTCAG TGGTCTGTCA GATGACAAGA ATTACAAGAA ACTGGAGAGG	180
ATTCTAACAA AACAGCTTTT TGAAATAGAC TCTGTAGATA CTGAAGGAAA AGGAGATATT	240
CAGCAAGCTA GGAAGCGGCG AGCACAGGAG ACAGAACGTC TTCTCAAAGA GTTGAGCAG	300
AATGCAAACT ACCCACACCT CGAG	324

(2) INFORMATION FOR SEQ ID NO:435:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 548 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:435:

GAATTCGGCC TTCATGGCCT AAATGATCAA ATTTTGGCTT ACATATTTTG CAACAGTGGT	60
ATAACACAAA GAAGTAAGCA AATATGGCAG AAGTGTGGTG GCTTTGGCGT CTACTTTTGA	120
CCATAGTGGT GGCCCTGTTA TCGTGGGCTC CCGGGGTTCC TACACATCCT TCCCGATGGA	180
AGAAGGGGTT GGCCAAAAG GTCAGCCAGC TGATGGGTTG GACCAAGAAA GACAGAGTGA	240
TAAGAATGAG TGACACCATG TTCTATCATT TTGTATTAGA TGCACCAAAA AACTATTCTG	300
TTATTGTGAT GCTTACTGCT GCTCTCCACG CGTTCAGTTC ATGTGTGATG TGCAAAGGTG	360
CTGCTGAAGA ATTTAGATC TTGGCAAATT CCTATCAACG CCCTGGTGCA TTCACCACAA	420

AGGTATTTTT TGCAATGGTG GATTATGATG AAAGCCCTGA GGTCTTTGAA GCGCTCCAGG	480
TAACGTCAGT TCCGAGTTTC TTCCACTTTT CTGCCCAATG GAAATTTACA ACAGATGACA	540
GTCTCGAG	548

(2) INFORMATION FOR SEQ ID NO:436:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 308 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:436:

GAATTCGGCC TTCATGCCT AAAATGAAAT TCAGACAAA TCACTGGCAC CAAAAATGGT	60
TTATTCGTGAG CTGTCTTCAC TTTGACTATT TGGGGGGCTT CTCTCAAGTA CAGATGTGGG	120
TTGGGGTCCC CTGGAGCAGG CAGGATTGGC AGTAAGAGAT ATTGGCCACT CAAGTCTACT	180
GTGTGTGTGT GCCTCTGGAA GAGTGAAGAA TGGACTTCAA AAGTAACATC AAAAAATCTAA	240
CTGCCACCAT CCTGGAGACA TTTTGCAGG CTTTCCTTTC AAGTCTTTCA AGTACAGGAC	300
ATCTCGAG	308

(2) INFORMATION FOR SEQ ID NO:437:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 420 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:437:

GAACAGAAGA GATCCCCTCG GCCCCACGC CATATGACCA AAGTCACACC AGGTTTCAGAG	60
CTGCCCCACTC CCAATGGAAC CACCTTATCA TCTAACCTCA CTGGTGGCAT GCCCTTCATT	120
GATGTGCCCA CTCCCATCTC CTCTGCAAGT TCAGAAGCTG CCTCAGCAGT GGTCAGTCCC	180
TCTACAGACA GTGGCCTGGA ATTCTCCTCC CAAACCACTT CCAAGGAAGA CTTACTGAT	240
CTAGAGCAAC CTGGCTCTCC AGGGTACAGC ACAGCTACAG AGCCTGGAAG CAGTGAGCTA	300
GGTGTTCCTCG AGCAGCCTGA CCTCCAGGAA GGGACCCATG TGGAAAAGTC CCAGTCAGCA	360
TCTGTGGAGT CCATCCCTGA AGTGTTAGAG GAGTGCACGT CCCCTGCCGA CCAACTCGAG	420

(2) INFORMATION FOR SEQ ID NO:438:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 279 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:438:

GAATTCGGCC TTCATGGCCT AATTGAATTC TAGACCTGCT TCTCACTGCA CCTGGATGGC	60
AACGTGCTGG ACCACTTCTC GGAGCTGCGC AGCGTCGAGG GGCTGCAGGA GGGCTCTGTG	120
CTGCGTGTGG TGGAAGAGCC GTACACGGTG CGTGAGGCCG GCATCCACGT GCGCCATGTC	180
CGAGACCTGC TCAAGAGCCT GGACCCATCC GATGCCTTCA ACGGGGTGA CTGCAACTCC	240

TTGTCCTTCC TGAGTGTCTT CACCGACGGC GACCTCGAG

279

(2) INFORMATION FOR SEQ ID NO:439:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 351 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:439:

GAATTCGGCC	TTCATGGCCT	AATTGAATTC	TAGACCTGCA	CCCAGCCTTC	TTCTTTTCAT	60
TATAACCTTT	ATACCACAGT	AAGCTGTTGC	ATCATTCAAA	TGACTCTGCA	TCCTATATTG	120
AATATTCTCC	ATTATTCTCT	AATATCTTTG	GGGGTACCCA	GGATTACAGG	GTTCTGGGCA	180
TACATGTAA	TGCTTTTGCC	AGGACTTTTC	TTTTTATTCA	TTGTCGTGAC	CCATTGTCTT	240
TGCTTATATT	TAAAGTTTTT	GCTCTTGATA	TCATTGGTTC	TTTCCTAAGT	CACTTTTTCT	300
GGTAACTGCT	TTGGAATGAA	TCATACATAT	CTCACTTACG	GAGCTCTCGA	G	351

(2) INFORMATION FOR SEQ ID NO:440:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 412 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:440:

GAATTCGGCC	TTCATGGCCT	ACCAATACTC	ATAATTAAAA	GTTTTTCGTT	GTCAAAACAT	60
TTTCACAGTT	CAGGAATCAC	AGTCCTATTT	CATCTTTTGA	AATAAAAGTT	AAAGTCCATT	120
TTTCTTAAGC	CTTATTATAC	CATTATCCAA	AAACACTACC	TAGCATTTCAT	CTTAGTTTTT	180
CATATCTCCT	TAGCAGATAG	TTTAGTATAT	TCCATTGTTC	TTATTGAGG	TTTAAAAAAA	240
GTTGTGGAAG	AAGTTTCTCA	GGAGTTCAGC	AAGCCTTTCC	ATCTATCTTC	TATTTTAAAA	300
GAATGTGATT	TATTGTTTTT	ATGAATAAAA	TATACCTCGT	GTGTTTCTCA	TATGATGTTT	360
CATTACATTA	ATCATCCATT	AAGTAAATGT	TTTGTGCTG	CAAAACTCG	AG	412

(2) INFORMATION FOR SEQ ID NO:441:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 292 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:441:

GAATTCGGCC	TTCATGCCTA	GCCAGGAGGA	GGAGGACCCT	ATGAACAAAC	TCAAGGGCCA	60
GAAGATCGTG	TCCTGCCGCA	TCTGCAAGGG	CGACCACTGG	ACCACCCGCT	GCCCCTACAA	120
GGATACGCTG	GGGCCCATGC	AGAAGGAGCT	GGCCGAGCAG	CTGGGCCTGT	CTACTGGCGA	180
GAAGGAGAAG	CTGCCGGGAG	AGCTAGAGCC	GGTGCAGGCC	ACGCAGAACA	AGACAGGGAA	240
GTATGTGCCG	CCGAGCCTGC	GCGACGGGGC	CAGCCGCCGC	GGGGAACCTG	AG	292

(2) INFORMATION FOR SEQ ID NO:442:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 222 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:442:

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GAATTCGGCC TTCATGGCCT ACCGCCTCGC TGCCTGGACA CCTGTCCGTG CCACCCTGGT      60
CACTGAGCAG GACATCCGCG TCTGTGGCCC CTGGGACCCT GCCCCGACA GCCAGGCCTG      120
GGTTTGTCTT TTTAGGTAGA GTGCCTGGTC CAGGTCATTG GAGGAGAGTC CACATGGCCA      180
CCTCTGGCGT GTTCTAGAGA GGCCCTCCCG TCTAGGCTCG AG                        222

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(2) INFORMATION FOR SEQ ID NO:443:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 205 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:443:

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CTTTATGACA GCCATGAGCT TTTTCCGGTG CATTGCAATT GTTTTCCAG TCCAGAACAT      60
TAATTTGGTT ACACAGAAAA AAGCCAGGTT TGTGTGTGTA GGTATTGGA TTTTGTGAT      120
TTTGACCACT TCTCCATTTC TAATGGCCAA ACCACAAAAA GATGAGAAAA ATAATACCAA      180
GTGCTTTGAG CCCCCACTAC TCGAG                                           205

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(2) INFORMATION FOR SEQ ID NO:444:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 178 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:444:

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GAATTCGGCC TTCATGGCCT ACCTGCCTCC CTCCTTGCTT CTTGCTCTGC TAACTCAACT      60
CTGCCTTCCT CTTTTCATT CTCTACTCT GCCCTATATG GAGGACAAAT GGACACCAGG      120
GGTGCTAACC TTATTGGTGC CTGCCCCAGC CTACCCAGG TGCAAGCAGA CTCTCGAG      178

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(2) INFORMATION FOR SEQ ID NO:445:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 251 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:445:

GAATTCGGCC TTCATGGCCT AGAAAGCCAC AAACCTTTTA GTTTTAACT TCAAAGGCTT	60
CTTTCTCTTT AAAAAAATT ATTTTAAATA TAGAGTCAAA AAATTGGATG TATTATTTTG	120
AGCTTCTAAT TGCTGCCACT TGGAGATGTC CAAGTAAGAA GGCCTTCTTT TTACATGGGA	180
TGAATTGTGC ACTTCTACTG ATGATGACTA CAGCAGAAGT GATGTTATAC GTACAGGCAC	240
TTGAACCTCGA G	251

(2) INFORMATION FOR SEQ ID NO:446:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 301 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:446:

GAATTCGGCC TTCATGGCCT AGGGCTTATA TTTTAACTGA ACTATTATTA AATAAAAACA	60
AAATAAAATC TTATCATATA GGTGTAATCT GTTCTAAGGA AAAATCCTT CTATCAAGAC	120
TAAACGTCTA ACTGAATACA GAATGACATT TCATGCCTTA AGGTCTCTGT CCATGTTGTT	180
CCTTCTTTCT ACTGTCCTTT ACTGTATTAG TTCAAAACAT TCTAATTCAC TCTCCAAAC	240
CCAATTCAA CATCACCATC AGAAAGTCTT CCATGATGGG CCAGGTGTGG CGGCCCTCGA	300
G	301

(2) INFORMATION FOR SEQ ID NO:447:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 150 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:447:

GAATTCGGCC TTCATGGCCT AGCTGAAATG CTTTCTATTG GATACTATCT GGGCATATTA	60
CTTCCTGTGG TTCACTGTCT GGGTGACAGG ATTCATAGAA GCCCAAACCT TAGCACCACG	120
CAGCATACCC TTGTAACAAA GCCACTCGAG	150

(2) INFORMATION FOR SEQ ID NO:448:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 226 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:448:

GAATTCGGCC TTCATGGCCT AATTGATTT TATTAGGTTT AAATTGTATT TCTTCAAATT	60
TCATAAACTA TAGCATTAT CTCCATATTT TTAATAAATG ATCACAAATA AATCACTGTT	120
AATATCTCCA TTTACACTTT TACAACCTCT GCTATTGCTG GATTTTTCAT CCTATGATAT	180

GTAAACCAA TTTAAATAC ATTTAAAGAA TCACAGCTGT CTCGAG

226

(2) INFORMATION FOR SEQ ID NO:449:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 453 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:449:

GAATTCGGCC	TTCATGGCCT	AAGACTGGGG	GCATGTACCC	CACCTACTTT	CTGCACCTGG	60
ACCGTGAGGA	TGGGAAGAAG	GTAAGGTTGG	TCTGGGCATG	TTATCATCTA	GGCTTTACAG	120
CCCTTTGAAA	TCCTAGGGGC	TGAAATGTGA	CTGGAAGTCT	CATATCTACC	GCTGACCTCT	180
CAGTTCCTCA	AAGAACTGC	CTTCGTGTCT	GGTCTGTGCA	CATCTTGTG	TTTCCAGTG	240
CATTTGTGTG	TGTGCACATA	TGTGCGTTTG	GGAGCTGACG	CAACGGAGAG	AGTCTGTGTG	300
AGTGGCTCTC	ATGACTGTGT	GCAGACCAGA	GGCTGAGTCT	GGAATATGAC	CTCATTCAC	360
TCCCAAGGT	GTCCTCCTG	GCGGGAAGGA	AGAGAAAGAA	GAGTAAACT	TCCAATTACC	420
TCATCTCTGT	GGACCCACA	GACTTGTCTC	GAG			453

(2) INFORMATION FOR SEQ ID NO:450:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 246 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:450:

GAATTCGGCC	TTCATGGCCT	AAAAGCAAAT	TAAGTTGTTT	TGAAAAGAAA	GTATAGATTA	60
ATTTTGTGTT	CTGTTTAAAT	TTTATCTCCT	TGGTAAAGAT	TTTTTTTCC	TGGGCAGAAA	120
ACTTGGCATT	TTTAGGCGTA	GATACCTTAC	CTTACAATGC	CAAAATGAAT	TTAATTCCAG	180
TACTCAGGTT	TTTCCCTTTA	ACAGACTCTA	TGTGTACCAG	GCATTGAATT	CTAGACCTGC	240
CTCGAG						246

(2) INFORMATION FOR SEQ ID NO:451:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 414 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:451:

GAATTCGGCC	TTCATGGCCT	AGTTTGGTGG	GGTTGAAGTT	GATGGCAAAC	TCATGGGAGA	60
CCTTCCAGTC	TGGGGGTAAC	TGGGCCCCGA	ATCCCAGAGC	TGGAAACATC	TTATCACTGT	120
CGTAGTCCTG	AATGATCTGC	CCAACAGCCC	AGATGGCCGA	CAGATATTCT	TTGGTGCCCA	180
TAGGGTTGAT	ATAGTGCAAA	GAGGAAGGGT	CGAGGGGATT	CCCGTTGGAG	GCTGTAAAGT	240
CTATTCCAAC	GGTGAACATG	AGCTGGCAGC	CTCCCAGGAT	GTAGTCAAGG	AAGGAGTAGT	300
CTCGGTTTAT	CTTGCAGGAT	CGCAGGATGA	TGATGCCCGA	GTTTTTATAG	TTCTTCTTCT	360

TCCTCTGCTT CTTGGGGTTG ATGCACTCGA ACTCCAGCGG GACGCTGTCT CGAG

414

(2) INFORMATION FOR SEQ ID NO:452:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 374 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:452:

GAATTCGGCC TTCATGGCCT ACACACTGAC TGACAGACCA CGGTATGCCT TGCACCACCC	60
TGGCTGCTGG GGTCCAAAGA GGGATCTGGT AGACCTGGGC TGGAATCTCA GCTTCACCAT	120
TTACCATCTG GGTGGCCAAT GGAGTGTTAC TTGGCCTCTC TGAGCCTCGG TTTTGCTCGT	180
CTCTGAAACA GTAAGATACC TCCCTTTGGC TGTGTGTATG AGGATGAAGG TTAGCCTATG	240
CCCAGTAGTA TGCCTGTCCC TTCATCGATG CCTGCTCATC TCACTCTTGC TCTGGAAACA	300
CCCCTAGTAG AGGCGCAGAG GGGCAGGGCC CACCCACCC ACCAAAACGT GGTGCAGAAT	360
GAGGTGATCT CGAG	374

(2) INFORMATION FOR SEQ ID NO:453:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 288 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:453:

CGGTCCGTCC GCCGCCACCA CCCACTCCGG ACACAGAACA TCCAGTCATG GATAAAAATG	60
AGCTGGTTCA GAAGGCCAAA CTGGCCGAGC AGGCTGAGCG ATATGATGAC ATGGCAGCCT	120
GATGAAAGTC TGTAAGTGA CAAGGAGCTG AATTATCCAA TGAGGAGAGG AATCTTCTCT	180
CAGTTGCTTA TAAAAATGTT GTAGGAGCCC GTAGGTCATC TTGGAGGGTC GTCTCAAGTA	240
TTGAACAAAA GACGGAAGGT GCTGAGAAAA AACAGCAGAT GGCTCGAG	288

(2) INFORMATION FOR SEQ ID NO:454:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 383 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:454:

GAATTCGGCC TTCATGGCCT AAGAAGTGTC TCCTGTATCC ACCTCTTCCT GGCCTCCCTT	60
CCCCCACTTC CTGGTCCCTG TCCAATCTCT AGGTTGTGTC TCTCACTTCT TGAAAGCTCT	120
AGGCACCCCC GCCTCCCGCC AGGCTCCCCG TTGGCTCCTG GCAGGCCAGC TGAGAATGAA	180
CAGGAGATGG AGGCAGGCAG CCCAGGCTGC AGAGGTGAGG GATGTGGGGC CAGGCCCAGA	240
GGGCTCAGCC TAGAGGCTTC CAATCTCAGA TTCTCTGCC TGTGGTCATC TGTTTGTCCA	300
TCACCCAGG ACAGGGCAGA CAGAGGGGCA AAGCACTGGG GGCCCCAGAG CCTAGCTTCC	360
CCTCAGCCTG GGGGAACTC GAG	383

(2) INFORMATION FOR SEQ ID NO:455:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 409 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:455:

AGAGCACGTC	AATGCCATGA	GGGGCCTGCA	AAGCAGCAAG	GAGCTCAAGG	CTGAGCTGGA	60
CGGGGAGAAG	GGCCGGGACT	CAGGGGAGGA	GGCCCATGAC	TATGAGGTGG	ACATCAATGG	120
TTTAGAGATC	CTTGAATGCA	AATACAGGGT	GGCAGTAACT	GAGGTGATTG	ATCTGAAAGC	180
TGAAATTAAG	GCCTTAAAGG	AGAAATATAA	TAAATCTGTA	GAAAACTACA	CTGATGAGAA	240
GGCCAAGTAT	GAGAGTAAAA	TCCAGATGTA	TGATGAGCAG	GTGACAAGCC	TTGAGAAGAC	300
CACCAAGGAG	AGTGGTGAGA	AGATGGCCCA	CATGGAGAAG	GAGTTGCAAA	AGATGACCAG	360
CATAGCCAAC	GAAAATCACA	GTACCCTTAA	TACGGCCCAG	AATCTCGAG		409

(2) INFORMATION FOR SEQ ID NO:456:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 317 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:456:

GAATTCGGCC	TTCATGGCCT	AAATTTTCATG	AAAAACAAAT	GGCTTAAACC	CAGGGAAGCA	60
AGGATTATAA	TTGATTTTTT	TGAGCAATGT	CTCTTTTGGT	TACAAAGTAA	AAGGTAAAT	120
AAAAGTTTAA	AAGCATTG	AAAGAATGTT	CTTTGGTTTT	TTCACTCAGT	AACCTAAAGT	180
TTAATGACCC	TTTACAGTGC	TGATAACAC	TTAAATTTTT	GCAGTAGGCA	TTGCTAGTTC	240
AAATTGAAGG	AAGGTTGCCA	GGCTCATGCC	TATAGTCCCA	ACTACTTAGG	AGGCTAAGGC	300
AGGGGGACGC	CCTCGAG					317

(2) INFORMATION FOR SEQ ID NO:457:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 510 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:457:

GAATTCGGCT	TCATGGCCTA	CTGCTCTTTG	GCTAAGGTGG	CAGTGTACCT	CTAGATCAAC	60
CTGGGCAACA	GTCACAAGGG	AGTGTGACTT	CTTGGCCATA	ATAAACTCAC	TTGATAGTGT	120
TTATGTTATT	AATCTGAATG	CAACAGAAGA	CAAAAGCACA	GGCATGCACA	CACACAGAAC	180
CCCAAACCAC	TAAAAACTAC	CTAAACACTG	ACTTAGTAAA	TAGTAAAAAG	GTAATGTTGG	240
GACTTTTAAA	CCTTGAATCC	ATTAGCCAGG	CTTGGGATGA	AAGGACCATC	TAAAATCATG	300
CTAGTCTAAA	CCATGCTCTT	CCACACAGCT	GTTTAAAAAC	CACTGGGTAT	GAGGAATATG	360
CTAGAAAGAA	ATGTTAAAAA	TAGATTGTTG	GCTCACACTT	ATTTTCTAA	TAAATAGGAC	420
CATTATTACT	ACCAGGAAAG	TCTTATTTAT	TTTGCTGAA	ATTGGCTTAA	AGAAAGTCTC	480

ATGACGGGAT GGGATGGGCC GGCACCTCGAG

510

(2) INFORMATION FOR SEQ ID NO:458:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 382 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:458:

GAATTCGGCC TTCATGGCCT AGCGGAAACA ACTGAACTA ATGGAAGATA TGGATACAGT	60
AATTAAACCC CGTCCTCAAG TAGTAAACA AAAAAACAG CGACCAAAT CTATTCACAG	120
AGATCATATT GAATCCCCA AAACACCAAT AAAGGGTCCT CCAGTCTCTA GCCTTTCTTT	180
GGCATCGCTG AACACGGGTG ATAACGAGAG TGTACATTCA GGCAAGAGGA CGCCAAGATC	240
AGAGTCTGTA GAAGGCTTCT TATCTCCAAG TCGTTGTGGC AGTCGAAATG GAGAAAAAGA	300
CTGGGAGAAT GCATCAACAA CTTCTTCAGT GGCTTCTGGA ACAGAATATA CAGGACCAAA	360
GCTCTACAAA GAACACCTCG AG	382

(2) INFORMATION FOR SEQ ID NO:459:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 433 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:459:

GAATTCGGCC TTCATGGCCT ACTGAGTCCC AGGCCGGGGC CCTGCCCCAG CCAGGGCTGG	60
GACTCTGCAG TTGGGAGCTT GTCCAGCTGC CCCCTCTAAT GCTTTTCTCC TCCAGGACAC	120
AGGGAGCCTC CGGAAGCACA GTAGTCCCG TGTGTACCT TAGGCTGACC TCTGTCCCCA	180
GGGGTGACGT AATGCTGTCA CTGTCTTGAA TTCTTCATCG TTTAACAGGG AGCCCAGTGT	240
TTTCAACAAA AGCAGAATTG GATTTTTTTT TTAAGTCGAT AAATTTTAC TCAAGGAATT	300
CCATGTTGTG ATTTCTTCCA CTGTCCATCA AGGTCACTTT AGATCCTCTA AAGAGCTAGA	360
GTCAAAGAT TTATCTTCAA GTTAGTCCCT TTTAATGAAA CCGATGCTTA TTTAATCCA	420
GTCAGCCCTC GAG	433

(2) INFORMATION FOR SEQ ID NO:460:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 305 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:460:

GTCCGGCTAA AGTAATCCAG TCACCTGCTG CTGATACTAG AAGGGCTGAG ATGTCACAAA	60
CAAATTTTAC CCCTGACACT CTTGCCAGA ATGAAGGGAA GGCTATGTCT TATCAGTGTA	120
GCCTTTGTAA GTTTCTATCA TCATCCTTTT CCGTGTAAA AGATCATATT AAGCAACATG	180
GTCAGCAAAA TGAAGTGATA CTGATGTGCT CAGAGTGCCA TATTACATCT AGAAGCCAGG	240

AGGAACTTGA AGCCACCTG GTGAATGACC ATGACAATGA TGCCAATATC CACACCGAAC 300
TCGAG 305

(2) INFORMATION FOR SEQ ID NO:461:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 563 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:461:

GAATTCGGCC TTCATGGCCT AAGAAATATC AGTCCAAGCA AGAGGAATTA CAGAAAGATA 60
 TGCAAGGAAG TGCACAGGCA TTGGCTGAAG TAGTGAAAAA CACAGAGAAC TTCTTAAAAG 120
 AGAATGGTGA AAAGCTGTCA CAGGAAGATA AGGCTTTGAT TGAACAGAAA CTTAATGAAG 180
 CTAAGATAAA GTGTGAACAG CTTAATTAA AAGCAGAACA GTCTAAAAAG GAGCTGGATA 240
 AAGTTGTGAC AACAGCAATC AAGGAAGAAA CTGAAAAGGT AGCAGCAGTG AAGCAGCTGG 300
 AAGAGAGCAA AACCAAATA GAAACCTTT TGGACTGGTT GTCAAATGTT GACAAAGACT 360
 CAGAAAGGCG AGGGACAAA CACAAACAGG TAATCGAACA GAACGGGACC CATTTC AAG 420
 AAGGTGATGG CAAGTCAGCA ATGGGAGAAG AGGATGAAGT TAATGGTAAC CTGTTGGAGA 480
 CTGATGTTGA TGGGCAAGTT GGAACCACTC AGGAGAATCT GAATCAGCAA TATCAGAAA 540
 TTAAGGCCCA ACATGGACTC GAG 563

(2) INFORMATION FOR SEQ ID NO:462:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 477 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:462:

GCGGCTGTGA AGATGGCGGC GGCTGCGTGG CTTGAGTGT TGCCTGTCAT TCTTCTGCTT 60
 CTGGGAGCTC ACCCGTCACC ACTGTCGTTT TTCAGTGCGG GACCGGCAAC CGTAGCTGCT 120
 GCCGACCGGT CCAAATGGCA CATTCCGATA CCGTCGGGGA AAAATTATTT TAGTTTGGGA 180
 AAGATCCTCT TCAGAAATAC CACTATCTTC CTGAAGTTG ATGGAGAACC TTGTGACCTG 240
 TCTTTGAATA TAACCTGGTA TCTGAAAAGC GCTGATTGTT ACAATGAAAT CTATAACTTC 300
 AAGGCAGAAG AAGTAGAGTT GTATTTGGAA AAACCTAAGG AAAAAAGAGG CTTGTCTGGG 360
 AAATATCAAA CATCATCAAA ATGTTCCAG AACTGCAGTG AACTCTTAA AACACAGACC 420
 TTTTCTGGAG ATTTTATGCA TCGACTGCCT CTTTATAGGAG AAAACAGGA GCTCGAG 477

(2) INFORMATION FOR SEQ ID NO:463:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 382 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:463:

```

GTTGCACTCC TGTTGTACTC TTTTAGAGGT GGAAAAGAGG TGGATACTGA GATCTAAGAG      60
GAAAGGATAG TCATTCACGT TCTGAGATAT GCGCTCTCTC TATTGTTCTC GAACACAAAG      120
GGATAGTCTC TTTTCTGGAG CTGATGTCCC TGCTTGGAGG TTAGCCCCAA AACATGGCTC      180
TTGTATTGTT CTAAGAGAAA AGGCTTTCAT TTTGGTTCTT CTGATTGGTG TTACCTACTG      240
CCTAATATGT GTTCATTTT TGACAGAGAG GCAGACTATT GAAAAAGTCT GTGTGAACAG      300
AGAGCAGTTC ATTAAGCCCA TTGCTTTCAG TAATGTGGCC TTGACCCCTT CTGCTTCCCC      360
CTTCTCCCAT GACGAGCTCG AG                                          382

```

(2) INFORMATION FOR SEQ ID NO:464:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 275 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:464:

```

GGACCTGCCT CAAGGACATG GGTGGACATA TGGGCGGACT CTCAGGGACA ACCAAAGTGA      60
TGATCACACT GACCGATGTC AATGACAACC CACCAAAGTT TCCGAGAGC GTATACCAGA      120
TGTCTGTGTC AGAAGCAGCC GTCCCTGGGG AGGAAGTAGG AAGAGTGAAG GCTAAAGATC      180
CAGACATTGG AGAAAATGGC TTAGTCACAT ACAATATTGT TGATGGAGAT GGTATGGAAT      240
CATTGTAAAT CACAACGGAC TCTAAACAC TCGAG                                275

```

(2) INFORMATION FOR SEQ ID NO:465:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 488 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:465:

```

GTTCTAGACC TACCCCGAAC AGCCCCAAC AGTCAGAGTG GCACAAAATG ACAGTCTCCA      60
AAAAGTCCCC CGACCAAGAT CTCAAAATCA AACTTGCTGT CCGAATGGAT AAGCCTCAAA      120
ACATGAAGCA TTCTGGGTAT TTATGGGCCA TCGGTAAGAA TGCTGGAAG AGATGGAAGA      180
AAAGGTTTTT TGTATTGGTG CAGGTCAGTC AGTACACGTT TGCCATGTGC AGTTATCGGG      240
AGAAGAAAGC GGAGCCTCAG GAACCTCTAC AATTGGATGG GTACACTGTG GATTACACCG      300
ACCCCCAGCC AGGTTTGGAG GGTGGCCGAG CTTTCTTCAA TGCTGTCAAG GAGGGAGACA      360
CCGTGATATT TGCCAGTGAC GATGAACAAG ACCGCATCCT GTGGGTCCAG GCCATGTATC      420
GGGCCACGGG GCAGTCACAC AAGCCTGTGC CCCCAGCCCA AGTCCAGAAA CTCAACGCCA      480
TCCTCGAG                                          488

```

(2) INFORMATION FOR SEQ ID NO:466:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 300 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:466:

```

GAATTCGGCC TTCATGGCCT AGCCGCTGCG GTGAGCCTTG AAGCCTAGGG CGCGGGCCCCG      60
GGTGGAGCCG CCGCAGGTGC AGATCTTGGT GGTAGTAGCA AATATTCAAA CGAGAACTTT      120
GAAGGCCGTC TGAGCTAAAA AATAATGCTG ATTTGGCCTC ATCATATTTA TGAAGGAGGG      180
AGAAATAGAA GCATGTATAA TGTAAGAAAA CATATCTTAT CCTTATGTTT GCATATATTG      240
TTGAATAAAT ATAGTTTAAT GAATATGTTT TCTCACCTTT CTTTGCTTGC ACTTCTCGAG      300

```

(2) INFORMATION FOR SEQ ID NO:467:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 381 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:467:

```

GTTCTAGACC TGCCTCGAGA TATGCCGGAA GGTTCATGG CTGGTCCCAG GGCCAGCACA      60
GGCCCGAGGC CGGGCTGCCT GGTTTATTT TTATTAACT TTATTTCTG TTTTATGAGT      120
GTGTGTCCGC CCACCCCCAC CCCCTTCAGT GTTAAGTGGG GAGCCCTGGG GGAGTCTCTC      180
CTGCCTCCCA GCCTCTCCCA AGACCTCCCC CTCGTCACC AGCCATCCCT CTGGACCAGG      240
CAGAGGGCGG ACCGGGTGGG CAGGGGCCTG AGGGTGGCTC GGGCCAGCCC ACCAGCCAAT      300
GGACCCCTCC TCAGGCCGCC AGTGTGCCCC TGCCCCTTT TAAACAAAA TGCCCTCGTT      360
TGTAACCCCT TAACGCTCGA G                                     381

```

(2) INFORMATION FOR SEQ ID NO:468:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 304 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:468:

```

GCTGTCCAAT TATACTGACC TGGCCATGAG CACGGTGAAG CAGACCCAAG CCATTCCATA      60
TACTGGTCCC TTAAATTGTC TCTGTTACCA GCTGCAGAAA TTGACAGGTG ATGTGGAAGA      120
ATTAGAAATT CAAGAAAAAC CTGCTCTGAA AGTGTTCAAA AATATTACTG TAATACAAGA      180
ACCAGGCATG GTGGTATTAG AATGGCTGGC AAACCCTTCT AATGATATGT ATGCAGATAC      240
AGTAACAAC TGTATATTGG AAGTTCAGTC AAATCCCAA ATAAGAAAA GCGCAGAACT      300
CGAG                                     304

```

(2) INFORMATION FOR SEQ ID NO:469:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 346 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:469:

```

GCGATTGAAT TCTAGACCAC CCCGCACTCC AGCCTGGGCA ACAGAGCAAG ACTCTTTCTT      60
AAAAAATTA AAAAAAAAAG GAGTACCCAT TGGGATAAAC CTCTTGGAG GAGAGGACAT      120

```

AGTACAGAGG	TTATACTGCA	ACATGGACCC	ACCAATAGCC	ATGGATAACT	TAGTTGGGAT	180
TACCCCTGCC	TGCTGTTTAG	ATACTTACAT	GGACACTAAT	TTCTGCCCAT	CAACCTCCCT	240
CTCTTTCTCC	TTCAATGCCC	ATCAACCTCC	CCCTCTTTCT	CCATCAATGC	TATGTTGGTT	300
TTTTTTATT	GCCATCTTG	CAGGTTTAGG	GCAGAGCATG	CTCGAG		346

(2) INFORMATION FOR SEQ ID NO:470:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 321 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:470:

GAATTCGGCC	TTCATGGCCT	AGGATTTTCA	GCAAGAATTA	AATTATTCTG	CATATTGGAC	60
AGGGCCTATT	TAGAGGCCTG	CACATCTGTT	TTTATCCATT	TGTGTAACGA	TACCGTGTGT	120
GAAAGTAGGT	TCATGGATCA	GATGAGAAAA	GTCAATTCTC	TAAGATACCT	TCCCTTGTGG	180
CTGTGGATT	TCACCTTGAT	GATTCAGCTT	TGTGTGATGG	AGGTGTCTGC	CAGAGAATTC	240
CTGGCCACCC	AGCTCCTCAG	CCCTCTGCCC	CCACCCCAAA	TACACACACC	TTTCTCCATT	300
GTACCAGATG	CTGGTCTCGA	G				321

(2) INFORMATION FOR SEQ ID NO:471:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 417 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:471:

GAATTCGGCT	TCATGGCCTA	CTTCATTCAC	TGTA AAAACCA	ATAGCAAACA	ACGGAAGAGA	60
CGGCAGAGT	TGAAGCAACA	AAGAGAGGAG	GAGGCAACAT	GGCAAGAGCA	GGAAGCCCCT	120
CGGAGAGACA	CTCCCAACGA	AAGTTCTTGC	GCAGTGGCCG	CCATTGGCAC	CCTGGAAGGC	180
AGCCCCCAG	GTATCTCCAC	CTCCTTCTTT	AGGAAGGTGC	TGGGCTGGCC	CCTCAGGCTG	240
CCGAGGGACC	TGTGTAAC TG	GATGCAGGGA	CTCCTGCAAG	CTGCTGGCCT	CCATATCAGG	300
GACAATGCTT	ACAACTACTG	CTACATGTAC	GAGCTCCTGA	GCCTGGGGCT	GCCACTCCTC	360
TGGGCGTTCT	CTGAGGTCCT	GGCAGCCATG	TACAGGGAAT	CTGAGGGCTC	CCTCGAG	417

(2) INFORMATION FOR SEQ ID NO:472:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 331 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:472:

GAATTCGGCC	TTCATGGCCT	ACAAGAGGCA	GCTTATAGAC	AACCGCAAGC	TCATTGAGAC	60
GCAAAATGGAA	CGGTTCAAAG	TTGTGGAACG	AGAGACCAAA	ACCAAAGCTT	ACAGCAAAGA	120
GGGCTGGGGC	CTGGCCCAAG	AGGTAGATCC	TGCCCAAGAG	GAGAAGGAAG	AGGTTGGCCA	180

GTGGCTCACG AATACCATCG ACACGCTCAA CATGCAGGTG GACCAGTTTG AGAGTGAAGT	240
GGAGTCACTG TCAGTGCAGA CACGCAAGAA GAAGGGCGAC AAGGATCAGA AGCAGGACCG	300
GATTGAGGGC TTGAAGCAGC AGCATCTCGA G	331

(2) INFORMATION FOR SEQ ID NO:473:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 260 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:473:

GAATTCGGCC TTCATGGCCT AGAGGTGCTT CAGTGGTACA ATCAGTTAGC ACACAGTACG	60
TATACAGCAG TATGTGTGTG AGAAATTATT TTAAATATAA GAATTATCAA AAATTATAAG	120
AAGACCATCC CTTTAACTGA ATAGTTTCAC CAAAATCAG AAAAATATGT AAGTGATACA	180
TTTTGTTTCT TGGATATAGC AATGTACCAC CTTGCATAAA TGAGACTATT AAAATGATCA	240
CCTGAGGTCA GAAGTTCGAG	260

(2) INFORMATION FOR SEQ ID NO:474:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 511 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:474:

GAATTCGGCC TTCATGGCCT ACAAAGATTT GAGGAAAAGA GGTTCAAATT GGACCACTCA	60
GTGAGTAGCA CCAATGGCCA CAGGTGGCAG ATATTTCAAG ATTGGTTGGG AACTGACCAA	120
GATAACCTTG ATTTGGCCAA TGTCAATCTT ATGTTGGAGT TACTAGTGCA GAAGAAGAAA	180
CAACTGGAAG CAGAATCACA TGCAGCCCAA CTACAGATTC TTATGGAATT CCTCAAGGTT	240
GCAAGAAGAA ATAAGAGAGA GCAACTGGAA CAGATCCAGA AGGAGCTAAG TGTTTTGGAA	300
GAGGATATTA AGAGAGTGGA AGAAATGAGT GGCTTATACT CTCCTGTCAG TGAGGATAGC	360
ACAGTGCCCTC AATTGAAGC TCCTTCTCCA TCACACAGTA GTATTATTGA TTCCACAGAA	420
TACAGCCAAC CTCAGGTTT CAGTGGCAGT TCTCAGACAA AGAAACAGCC TTGGTATAAT	480
AGCACGTTAG CATCAAGACT GAAACTCGA G	511

(2) INFORMATION FOR SEQ ID NO:475:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 610 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:475:

GAATTCGGCC TTCATGGCCT AGTCACAGCT GTCTATTTTT GTCAGTGTGCG GAACATTGTT	60
CATCGTGATT TAAAAGCTGA AAATTTACTT CTGGATGCCA ATCTGAATAT CAAAATAGCA	120
GATTTTGTT TCAAGAACCT CTTCACTCCT GGGCAGCTGC TGAAGACCTG GTGTGGCAGC	180

CCTCCCTATG	CTGCACCTGA	ACTCTTTGAA	GGAAAAGAAT	ATGATGGGCC	CAAAGTGGAC	240
ATCTGGAGCC	TTGGAGTTGT	CCTCTACGTG	CTTGTGTGCG	GTGCCCTGCC	ATTTGATGGA	300
AGCACACTGC	AGAATCTGCG	GGCCCGCGTG	CTGAGTGGAA	AGTTCCGCAT	CCCATTITTT	360
ATGTCCACAG	AATGTGAGCA	TTTGATCCGC	CATATGTTGG	TGTTAGATCC	CAATAAGCGC	420
CTCTCCATGG	AGCAGATCTG	CAAGCACAAG	TGGATGAAGC	TAGGGGACGC	CGATCCCAAC	480
TTTGACAGGT	TAATAGCTGA	ATGCCAACAA	CTAAAGGAAG	AAAGACAGGT	GGACCCCTG	540
AATGAGGATG	TCCTCTTGGC	CATGGAGGAC	ATGGGACTGG	ACAAAGAACA	GACACAGAAG	600
GCGGCTCGAG						610

(2) INFORMATION FOR SEQ ID NO:476:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 409 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:476:

GGAGATTGGC	CACCTCCAAG	ATATGGTAAG	GAAAAGTGAA	CAAGGTCTTG	GCTCTGCAGA	60
AGGACTTATT	GCTAGTCTTC	AGGACTCCCA	GGAAAGGCTT	CAGAATGAGC	TTGACTTGAC	120
TAAAGACAGC	CTAAAGGAGA	CCAAGGATGC	TCTATTAAAT	GTGGAGGGTG	AGCTAGAACA	180
AGAAAGGCAA	CAGCATGAAG	AAACAATTGC	TGCCATGAAA	GAAGAAGAGA	AGCTCAAAGT	240
GGACAAAATG	GCCCATGACT	TAGAAATTAA	GTGGACTGAA	AATCTTAGAC	AAGAGTGTTC	300
TAAACTTCGT	GAAGAGTTAA	GGCTTCAACA	TGAAGAGGAT	AAGAAGTCAG	CAATGTCTCA	360
ACTTTTGCAG	TTGAAAGATC	GAGAGAAAAA	TGCAGCAGAG	AAACTCGAG		409

(2) INFORMATION FOR SEQ ID NO:477:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 272 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:477:

GTATGCCTGT	TCCAGACCAG	CCTTCATCAG	CCTCAGAGAA	GACGAGTTCC	CTGAGCCCCG	60
GCTTAAACAC	CTCCAACGGG	GATGGCTCTG	AAACAGAAAC	CACCTCTGCC	ATCCTCGCCT	120
CAGTCAAAGA	ACAGGAATTA	CAGTTTGAAA	GGCTGACCCG	AGAGCTGGAG	GCTGAACGGC	180
AGATCGTAGC	CAGCCAGCTG	GAGCGATGCA	AGTCGGATC	CGAGACTGGC	AGCATGAGCA	240
GCATGAGTTC	AGCAGAAGAG	CGGATACTCG	AG			272

(2) INFORMATION FOR SEQ ID NO:478:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 284 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:478:

GAATTCGGCC	TTCATGGCCT	ATGCGTGGGG	GTGGGGGGGC	AGGCTAGAAA	GGAGCCCTCC	60
CTCCTCGGGG	TGTCTAGGGT	GTGCTGGCCA	CTGGAAGATT	GGAGTCGCTG	ACCCAGTGCT	120
GACCCTGACC	CTTGGCTGGG	TCCACTCTGC	AGACTCCACC	TGAGGAGACC	CACCCAGGGT	180
GAAGCTCGGT	GCCCAGGCCT	GAAGTGGCC	CGGCCGGGTG	CAAGGGCTGA	GGTGTGAGGT	240
CGGCCAGGC	CTCTTCCCAG	GCCTGAGGGT	GGCTACAGCT	CGAG		284

(2) INFORMATION FOR SEQ ID NO:479:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 352 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:479:

GAATTCGGCC	TTCATGGCCT	ACTAAATTTT	CCAAAACGTT	GATTTGCATA	ATACAGTGGT	60
ATGTGCAATG	GATAAATTGC	CGTTATTTCA	AAAATTAAAA	TTCTCATTTT	CTTTCTTTTT	120
TTTCCCCCT	GCTCCACACT	TCAAACTCC	CGTTAGATCA	GCATTCTACT	ACAAGAGTGA	180
AAGGAAAACC	CTAACAGATC	TGTCCTAGTG	ATTTTACCTT	TGTTCTAGAA	GGCGCTCCTT	240
TCAGGGTTGT	GGTATTCTTA	GGTTAGCGGA	GCTTTTTCCT	CTTTTCCCCA	CCCATCTCCC	300
CAATATTGCC	CATTATTAAT	TAACCTCTTT	CTTTGGTTGG	AACGACCTCG	AG	352

(2) INFORMATION FOR SEQ ID NO:480:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 263 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:480:

GAATTCGGCC	TTCATGGCCT	ATTAAAAGAA	TGTTCTTTCA	TTAAAAGACC	AAAAAGAAGT	60
TAAAACTTAA	ATTGGGTGAT	TTGTGGGCAG	CTAAATGCAG	CTTTGTTAAT	AGCTGAGTGA	120
ACTTTCAATT	ATGAAATCTG	TGGAGCTTGA	CAAAATCACA	AAAGGAAAAT	TACTGGGGCA	180
AAATTAGACC	TCAAGTCTGC	CTCTACTGTG	TCTCACATCA	CCATGTAGAA	GAATGGGCGT	240
ACAGTATATA	CCGTGTTCTC	GAG				263

(2) INFORMATION FOR SEQ ID NO:481:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 379 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:481:

GGAGCAGGAA	GAAATGCAAG	AGGAGATGGA	GAAGCTGCGA	GAGGAAAACG	AGACTCTCAA	60
GAACGAGATC	GATGAGCTGA	GAACCGAGAT	GGACGAGATG	AGGGACACTT	TCTTCGAGGA	120
GGATGCCTGT	CAACTGCAGG	AAATGCGCCA	CGAGTTGGAG	AGAGCCAACA	AAAAGTCCCG	180
GATCCTGCAG	TACCGCCTCC	GCAAAGCCGA	GCGCAAAAGG	CTCCGCTACG	CCCAGACCGG	240

GGAAATCGAC GGGGAGCTGT TGCGCAGCCT GGAGCAGGAC CTCAAGTTG CAAAGGATGT 300
 ATCTGTGAGA CTTACCATG AATTAGAAAA TGTGAAGAA AAGAGAACAA CAACAGAAGA 360
 TGAACCGAG AATCTCGAG 379

(2) INFORMATION FOR SEQ ID NO:482:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 301 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:482:

GAATTCGGCC TTCATGCTTT CTAGGCAAGA GGTATCAGA AGATTGAGAG AAAGAGGAGA 60
 ACCAATCAGA CTATTTGGAG AGACTGATTA TGATGCTTTT CAACGTTTAA GGAAAATAGA 120
 GATCCTCACA CCAGAAGTTA ACAAGGGATT GAGGAATGAT TTGAAAAGCAG CTTGGATAA 180
 GATTGATCAG CAGTACCTCA ATGAAATCGT CGGCGGTCAG GAGCCTGGAG AGGAAGACAC 240
 ACAGAATGAT CTGAAAGTTC ATGAGGAAAA CACCACAATT GAAGAGTCAG AGGCCCTCGA 300
 G 301

(2) INFORMATION FOR SEQ ID NO:483:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 168 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:483:

TGGTCTCCAG AAATGCTTTG GGTTCATCTT TCATTGCTGC AAGGAACTTC CATGCCTCTA 60
 AACTCATCT TCAAAAGACT GGGACTGCTG AGATGTCCTC TATTCTTGAA GAGCGTATTC 120
 TTGGAGCTGA TACCTCTGTT GATCTTGAAG AAAGTGGCT ATCTCGAG 168

(2) INFORMATION FOR SEQ ID NO:484:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 452 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:484:

GCAAGCTCTC CATGGAACC CCTGCCAAA CAGAAGAGAT AAAACTGGAA AAGGCTGAGA 60
 CAGAGTCCTG CCCAGGCCAA GAGGAGCCTA AATTGGAGGA ACAGAATGGT AGTAAGGTAG 120
 AAGGAAACGC TGAGCCTGT CCTGTCTCCT CAGCACAGAG TCCTCCCAT TCTGCTGGGG 180
 CCCCTGCTGC CAAAGGAGAC TCAGGGAATG AACTTCTGAA AACTTGTG AAAAATAAAA 240
 AGTCATCTTC TCTTTTGAAT CAAAACCTG AGGGCAGTAT TTGTTAGAA GATGACTGTA 300
 CAAAGGATAA TAAACTAGTT GAGAAGCAGA ACCCAGCTGA AGGACTGCAA ACTTTGGGGG 360
 CTCAATGCA AGGTGGTTTT GGATGTGGCA ACCAGTTGCC AAAACAGAT GGAGGAAGTG 420
 AAACCAAGAA ACAGCGAAGC AAAGGACTCG AG 452

(2) INFORMATION FOR SEQ ID NO:485:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 352 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:485:

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TTTTGTAAAT CACCTGATGA TGGTGATATA GCTGTGGCCA ACGAAATGTC AAGGGAAGTC      60
TGCTGGGGAA GGTAGACGTA GGATAGGAGT ATGGGAAAAA ATTATTCAC TCAAAGCATG      120
ATGCACAGAG GAGCTATGAT CTTTCTTGT TTCTCTACT GGATGTTGTC ATGTCTGTAT      180
GTACTTCCTG GAACTGTGGC ACCATCTTAC AACCATGAAA GGAGCTCACA TGAAATCATG      240
TTGAACATAG CAGAGCGGGA AGATGGAAGG AATCCGAGAT CTATGTTTGA TGTAAGCGA      300
TGATGTTAAA AACTTAAAAA ACTCCAGAAC TCTCTACCC CTGGTGCTCG AG              352

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(2) INFORMATION FOR SEQ ID NO:486:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 420 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:486:

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GAATTCGGCC TTCATGGCCT ACTCAGCTGG AAGCTTTACT CCCTCCTCGA CAGAAAGTGA      60
GGATTACAGA TGACATGGAT CAGGTGGAGC TGAAGGAGTT TTGTCCCAAT GAGCAGAACT      120
GGCGTCAGCA CAGGGAGGCC TACGAGGAGG ACGAAGACGG GCCCCAGGCT GGAGTGCACT      180
GCCAGACGGC ATGACGTGGT GCGGGGCAGC GTGGCCCCAC CGGACTAGCA CATGATGAAT      240
GTAAAGTTGG CACAATGAAA ATGACATCGC TTTAATGGCC TTGTGTTTGG GATGTCCTGT      300
GTATGTGTTT AGCATTCTTA ATTGCTGAGT GTCTTTTGG CTTTCTTTT GGTGTGTAAT      360
TAAGTTATAG CTTAATTTAT ATTTAAATGT TTTAAGTATA AATCACCTCT AGGCCTCGAG      420

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(2) INFORMATION FOR SEQ ID NO:487:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 318 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:487:

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GGAGTGTCAA GAATAACCGC TCAGGTTGAG TGTAAAAATA TTTTATGGTC CCATCAGCAT      60
CAACCTGCCT TAATGCTTCT TTGGTTGTCT CTTACGCTAG TTCTTATTTT ACAGCACATG      120
ATATATGAAG TGATTTACAA CCATGCCCAA GATACGGGCC ACCCACCAGC TACATGGCAT      180
GATGACTCTG CAGGCCGAAC GGCAGCCTTG ATAATTATAA GGCCATGGGT AATAGCCCCC      240
CAGGGGTTCA CAGATCTTCT GGCAGTGGGT GTAGCTCCGC CTACATTCTA TACAACAGAT      300
TCCTTCGCCT GCCTCGAG                                318

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(2) INFORMATION FOR SEQ ID NO:488:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 487 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:488:

GAATTCGGCC	TTCATGGCCT	AGGTGTTTGC	TTTAAGGAGG	AATAGAAAAA	TCAGGTGGTC	60
ACTACTACAA	GGGAAAGGGG	AATGTGGTTT	CAAAAAGGGT	TTTGCCTTAT	TTATTTTAT	120
AGTAGATACT	TATTAATCAA	ACATTTAAGA	GCAACTCAGT	AAGTATTTGT	CCAGAATGAA	180
CTGTTCTCAA	GACTAGGTTT	ACTGCTTGAC	ATTAGAGGTT	AAGGTGTTGC	AATTCTGAGT	240
CTTGTTTTTT	ATTACTACCA	ACCCCCACCC	CCGCCGATAT	TACTTCATCT	CCCTCCAAGG	300
TCACTGAAGT	TTTTCATAAC	TATTTTAACA	GATATTGCAA	TAAATGTACA	GTAATTTAAC	360
TATCCTTCTT	GCTGGGCATG	TCAAAGTGTT	TTCTATTATT	ACAGATAATG	CTGCAATGAA	420
TCTTTATTTA	TATAATACAC	TTTTATCCAG	TTGTCATTTT	TTCTTTGTCT	TATATTCTCA	480
CATGGAA						487

(2) INFORMATION FOR SEQ ID NO:489:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 149 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:489:

GCGATTGAAT	TCTAGACCTG	CCTCGAGACA	AAACTGTGA	ATAGTGAGTG	ATTTAAAAAA	60
AAAAAATAAA	CTGAAAGGAA	AATTGTTGAA	TGTTTGAATC	TTGCCTAGTC	CCCTCACCCC	120
CAAGGCTGGC	TTCTAGAGTT	AAGCTCGAG				149

(2) INFORMATION FOR SEQ ID NO:490:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 259 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:490:

GCAAATTTTG	GAAGATTTAG	ACCATTATTT	CTCAAATAT	TTCTTACCTG	CTCTCTCCTC	60
TTTCTCCAC	TCCTCCCAT	CACCTTCTGG	CACTTCCATT	GTTTCATATAT	TGATATGCTT	120
AATGATGTTT	CTGAAGATTT	ATTCATTTT	CCTTTATTC	TTTTTATTCT	GTTCTCAGC	180
CCAGATCATT	TCAATGCACA	TATCCTCAAG	TTTGCTGATT	CTTTCATTTC	CTGCTCAGAT	240
CTGCTGCTGG	CCCCTCGAG					259

(2) INFORMATION FOR SEQ ID NO:491:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 320 base pairs
 (B) TYPE: nucleic acid

(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:491:

GAATTCGGCC	TTCATGGCCT	ACAAATGTTT	AATCAGAGAC	TCATATTCAC	CTTTAAGTAA	60
AAAACATACT	TCTTTCCCCC	TAATAGTCAC	AGCATTCTGC	AGAGCTAAAG	AAGGAGACCA	120
GGAGTCTGTG	GGAGCAAAGA	TCATTTTGTG	AAGCTAGAGG	TCCAATTTAA	AAGCAGTTGC	180
TGCTACAAAT	TAAAACATAT	TTGCATTCTG	CCTAAAATAG	TTGTCTCTTT	GAACGTTGGG	240
TGCCTTTTTT	AGGTGCTTT	GTGAATAATA	TGCACAAAAT	GAAAATGTTA	AAAAAACAT	300
GTAGCCTGCT	AACCCTCGAG					320

(2) INFORMATION FOR SEQ ID NO:492:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 224 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:492:

GAATTCTAGA	CCTGCCTCCA	GCCACTTCAA	ACCTTTGGTG	ACCAAAGTGG	GGTAAAAACA	60
AGCACCTGCG	TGCGTTGTGG	TTATTCTATG	CTCTCCAATA	TATATAAATT	TTAAGAAGTT	120
TTTCTTGAGG	TGGTCAGTTC	TTAAACCAAG	AAAGTGGTAG	TAGTTGATTT	TAATTAGTGT	180
AAAGTTGTCT	TCGTAAC TTC	CGTGTGGTT	GGAAATAGCT	CGAG		224

(2) INFORMATION FOR SEQ ID NO:493:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 320 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:493:

GAATTGCCTT	CATGGCCTAC	CGAATCAGAC	AGAAGAAAGC	CCAGGGCTCC	ACTTCTTCTA	60
CAAGGTGCA	TGAGCCCGAG	AAGAA TGCCA	GAGAAATAAC	ACAGGACACA	AATGATATCA	120
CATATGCAGA	CCTGAACCTG	CCCAAGGGGA	AGAAGCCTGC	TCCCCAGGCT	GCGGAGCCCA	180
ACAACCACAC	GGAGTATGCC	AGCATTGAGA	CCAGCCCGCA	GCCCGCGTCG	GAGGACACCC	240
TCACCTATGC	TGACCTGGAC	ATGGTCCACC	TCAACCGGAC	CCCCAAGCAG	CCGGCCCCCA	300
AGCCTGAGCC	GTCCCTCGAG					320

(2) INFORMATION FOR SEQ ID NO:494:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 504 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:494:

GAATTCGGCC	TTCATGGCCT	AGGTAGCTCT	ATGGTTTTC	TCGCGTTCTT	GAGTCGGGAA	60
ATGGCCGCTG	TGTGGTTGCA	ACGGAGATAA	ATTCCCGGAA	CCGCGATTCC	GCGTGTCAGG	120
AATTCGAATT	TAGAGTTTAA	TTTCTCAGAG	CATTCTCTCC	AGGAAGAATT	TTTACAGTAT	180
CTCAAAGACT	TCACTTGACT	TCTTGATCCT	GCATAAAACC	AAGGAGAAAA	GAAATGGGTC	240
GCTCCAATTC	TAGATCACAT	TCTTCAAGGT	CAAAGTCTAG	ATCACAGTCT	AGTTCTCGAT	300
CAAGATCAAG	ATCTCATTCT	AGAAAGAAGC	GATACAGTTC	TAGGTCTCGT	TCCAGAACAT	360
ATTCAAGGTC	TCGTAGTAGA	GATCGTATGT	ATTCTAGAGA	TTATCGTCGC	GATTACAGAA	420
ATAATAGAGG	AATGAGACGA	CCTTATGGGT	ACAGAGGAAG	GGGTAGAGGG	TATTATCAAG	480
GAGGAGGAGG	TAGAAACCCT	CGAG				504

(2) INFORMATION FOR SEQ ID NO:495:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 190 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:495:

GAATTCGGCC	TTCATGGCCT	ACCAACTTAG	TCATTGAAG	CCCAAGAGTC	TAATTTTATA	60
TGCCCTGCCA	ATGTCCTCAT	CTATTGCAGA	ATGNATAATT	ATCTATTGT	TTTGGACTAT	120
ATGTTACAAA	AATTTAAAC	ATAAGATCCT	CTCTCTATAT	TTCATTATTG	GTGAACCCAC	180
ATTGCTCGAG						190

(2) INFORMATION FOR SEQ ID NO:496:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 305 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:496:

GAATTCGGCC	TTCATGGCCT	AGGTAAGAAA	ATCGTCAATG	AATTGTGGCA	TGACCAGGTG	60
GAGAGTAAGT	GTCATAAAGA	GGGATAGTGG	ATAGTATAAT	GTCAGGCACC	TCAAAGGAAC	120
TGGGCAGGGA	GTTAGGGAGT	AAAAAGGGCG	GTGGTCTGGA	AGCAGAAAGG	AGGAGCAGTG	180
GTCCAGTAGG	GGCTGCAGAG	CTGCAAGGCT	TTGCCTCAAT	CCTGTCAAAG	GCAACTTCAA	240
GCTTTCCAGG	AGCCATACTC	CTTCATTGT	TCATTACTTT	CTAGATTAGG	AAATCACCAC	300
TCGAG						305

(2) INFORMATION FOR SEQ ID NO:497:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 334 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:497:

GAATTCGGCC TTCATGGCCT AGGTGGACCA ATGTACAGCA CTCAGGTTCA TGGCCAACTG	60
GGTGGACTAT TTCAGTACTC TACAGGTGCC TCAGTGGAGG GAGAGCCCAT TGTCCAGGTG	120
CTTCCTGGGA CAATACCAGA GCGCTCTGGG AAAAGGGCTG CTTGCAGGCA CGAGGGCTCA	180
CAATGAGCCA TGGTGGGCCA CCGCCACGGC CCATGCAGCC TAATAGCAAG CCAAGGCAGG	240
AAGCTGTGAG AGCTGCTCAA CAGTGCCCCC TAGGGACTGG TTAATTCCTG ACCCTAACCT	300
CCGAAATCT GCTGTCAAAG GCAGATTCT CGAG	334

(2) INFORMATION FOR SEQ ID NO:498:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 160 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:498:

GAATTAGGGG CTTTTTCATC CTTAGGAGAC CTGAGTCCTC AAGAAAACCC TTTTCTGGAA	60
GTATCTGCTC CTTGAGACA TTTTATAGAA AAGAATAATA CAAAACACAC AACTGCAAGA	120
AATGCCTTTG AAGAAAATGA TTTTATGGAA AACACTCGAG	160

(2) INFORMATION FOR SEQ ID NO:499:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 276 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:499:

GAATTCGGCC TTCATGGCCT ACTCGATCTC CTGACCTCGT GGTCCACCCG CCTCGGCCTC	60
CCAAAGTTCT GGGATTACAG ACGTGAGCCA CCGCGCCCGG CCTGTCTCTG GATTTTTTAA	120
CCAAGCACTA TTATTTATAG TTGCGTTAAA ATAAATAGGG ATGGGTTTGA TAAGTCACCA	180
CTGGTGCTT TAAATTCTGC CATCATCTTT TCTAGGAGTG TAAGATATAG AGATACACAT	240
AAGCAGAAAA TTTTTTTTAA CATGAGGATA CTCGAG	276

(2) INFORMATION FOR SEQ ID NO:500:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 256 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:500:

GAATTCGGCC TTCTGGCCTA GACCTGCCTC TGATATGTAC TTGGTTTTTA AAAACCCATT	60
TTGTTCTCTC TTGTTTCTC TCTATTTTCTC CTTAGTATCA GAAGGCCAGG CGAGACTGCA	120
ACACTGCTCA TCACCCCGCG GCGTGATCCC TGCTCTTAGG TGCTGGGCAG AGGGGAAGGG	180
TGGTCAGGGT GAGGATGGTG AGGGAGGGCT GGTGAGGGGC TCAGAGGAAT ACTTGAACA	240
ACAGCAGTGT CTCGAG	256

(2) INFORMATION FOR SEQ ID NO:501:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 635 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:501:

GAATTCGGCC	TTCATGGCCT	AGTGGTTTTG	TTGTTGTTGT	CGGAGACAGG	GCCTCGCTTG	60
GTCTCCCAGG	CTAGAGTGCA	GTGGCATGAT	CACGACTCAC	TGCAGTCTCG	ACCTTCTGGG	120
CTCAAGTGAT	CCTCCTGTGT	CAGCCTCCCA	CACAGCTGGG	ACTACAGGCA	CATGCCACCA	180
CATCCAGCTA	ATTTAAAAAA	CATTTTTTTT	GTAGAAATAG	GGTCTTACCA	TGTTGCCAG	240
GCTAGTCTCA	AATTCCGGGG	CTCAAGCAAT	CCTCCCACCT	CACCTTCCCA	AAGTGCTGGG	300
ATTACAGGCA	TGAGTCACCA	TACTTGCCCC	GAGTGAGCCA	AGATTGCACC	ACTGCACTCC	360
AGCCTGGGCT	ACAGAGCAAG	ACACTATCTT	AGATCCNNAA	AGGAAAAAAA	AAAAAGAAGG	420
AGAAAGAACC	AGAGAAACAT	AAGGAAGAGT	GAGAGGAAGA	AAGAAAGATG	CAATTGGGA	480
AGAAATGAAA	AAGAAATGAA	TAAAGAATAA	AATAATGTAA	CGGTCAATAA	ATAGGACTTG	540
TGAATGGAGG	CCTTAGGCC	AAAGGCTATG	ATTAATTTCA	AGCTATGTTA	CTGAAGTCCA	600
TAAACAAAGG	ACTCAGATCT	AAATGGGTAC	TCGAG			635

(2) INFORMATION FOR SEQ ID NO:502:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 452 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:502:

GAATTCGGCC	TTCATGGCCT	ACCCGTAGAA	ATCCCCCTTT	CTCTAATAGC	GAGGCTCTAA	60
CCACACAGCC	TACAATGCTG	CGTCTCCCAT	CTTAACCTTT	TGCCTTTGCC	ACCAACTGGC	120
CCTCTTCTTA	CTTGATGAGT	GTAACAAGAA	AGGAGAGTCT	TGCAGTGATT	AAGGTCTCTC	180
TTTGGACTCT	CCCCTCTTAT	GTACCTCTTT	TAGTCATTTT	GCTTCATAGC	TGGTTCCTGC	240
TAGAAATGGG	AAATGCCTAA	GAAGATGACT	TCCCAACTGC	AAGTCACAAA	GGAATGGAGG	300
CTCTAATTGA	ATTTTCAAGC	ATCTCCTGAG	GATCAGAAAG	TAATTTCTTC	TCAAAGGGTA	360
CTTCCACTGA	TGGAACAAA	GTGGAAGGAA	AGATGCTCAG	GTACAGAGAA	GGAATGTCTT	420
TGGTCTCTT	GCCATCTATA	GGGGCGCTCG	AG			452

(2) INFORMATION FOR SEQ ID NO:503:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 286 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:503:

GAATTCGGCC	TTCATGGCCT	ACAAAATTGT	CTTGACATAA	GTAATTTGGG	TATGCTGTAT	60
AAAGGCTTCT	AAGAATTAAG	AAACATGGCC	CGGGTTGCAA	ATTTTAATGC	ATGACTACCT	120

TTTTTCTAT AGAATATAGC TTTGTCAGA TTCTCAGCAG TGGCTCTGAT CCAGAAAACA	180
TTAAGAACCA CTGGTCATGA GTGGTGATTT TCAGCTTTTT TGGTCTTAAC CCACTTAGGT	240
GGGACAGAAG CTCCTTATCT CACCTATACC ATCCAGCATC CTCGAG	286

(2) INFORMATION FOR SEQ ID NO:504:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 424 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:504:

GAATTCAGCC TTCATGGCCT AGAGGGGTTT AGGATTCAAA GCAAAGGGGA GACAGCTACT	60
AAGTAAACTA CAAAATAATT GCTAACTGA AAATTGTATA AAGTGACTG GACAGATGAT	120
GTTCCTAATT CTTATCCATG AAATATTTTC TGCCTTCTTA GAGGAAATAG CACCTGACAC	180
AACACTAGCC ACATTGTAGG TGATCAATCA GCACATGTCT AAATAAATTA ATTAATAAAG	240
AATCAATTAG AAATTCCACT GAAAATTCTT CTAAATATA ACCAACTTCA TTATGACAAG	300
CTATGAATAT AGAGCTTACA TACATGTTAT ATATCAATAT GTGAGTAGAT AAAGAATGAA	360
TGCCTTAAAT TGTGGGATTT TTTATTGTTT TTGTTCTTGT TTTGGAGATG GGGTCTCACT	420
CGAG	424

(2) INFORMATION FOR SEQ ID NO:505:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 204 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:505:

GAATTACTCA GTTTCAGGT TCTCCTAGC TCGGGGCTTT TAAATTTTGA AATCTAAACA	60
TTCTTTCCCA CCATCCTTTT TGAAGTTTGA CCTTGGTTTT CTCTTCTAAG TTCTGTGCC	120
TCTGCTTCCT TACTTTTTTT CCTTTTGA TTTCTATCTT ATCTGTCTTT TGTTCACTTT	180
TTAATGCTAT ATATGGATCT CGAG	204

(2) INFORMATION FOR SEQ ID NO:506:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 218 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:506:

GAATTCGGCC TTCATGGCCT ATAGGCCATG AAGGCCGAGA TGTACAGTAA TAAGTATGCA	60
CAGAAATGTT AGATTATTTT TGAAGATGTG GAGAACTAC TGTTATTTTT GCTTATATTC	120
TTCTCTAAAA ATTCATAAA TGAATAACAG TTATTGGTTT TGCTATTCAA GATAATTATA	180
AAAATATCTA TTATAGCTAA TCTTCACATG AACTCGAG	218

(2) INFORMATION FOR SEQ ID NO:507:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 352 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:507:

GAAGTTTAAC	ATTCAACTG	TTGGTAAAAT	CTCCCTGGTG	CCACCTTGTC	GCACCCCCCT	60
GTTATGAGGC	ACAGTTAGTG	GGTTTATGAG	AGGTTTGTTC	AGTGAAGCTC	CTGCCACTGT	120
AGACCTAAAT	GTTTCTCTCC	CTGTTGAAGT	GACCTGCCTT	CCTCTTTAGT	ACCTAACACA	180
GTGGCAAAG	AGCATGGCTA	ACTCAAACCC	TTTTCTTTGG	GGGCAGGCTT	CCCTTTCTCT	240
CTGGCAGGTA	TATTAAAAAA	TTACAAAATA	GTAAATTTGC	CAAATTTTTC	TTGGTGTGTA	300
GCAAGGCATA	AAGACTGAAA	AATATCTTAT	GAATTAGTTC	ACTTCCCTCG	AG	352

(2) INFORMATION FOR SEQ ID NO:508:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 283 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:508:

GAATTCGGCC	TTCATGGCCT	AAAATGATAC	AGTGTGCAGA	ACTGGACCCA	GTAGGGAATG	60
ATAAAATGTA	CAGATGTGCA	GAACAGGACT	TGGTAGGACT	CAGCAGAGAA	AACAGGAGGA	120
GAGATGAAAA	TGATATGGTG	TGCAGAACTG	GACTCAGTAA	GGTGCAGAAA	GGGGAAGGAT	180
TCTGACAGAA	TCCAGCACAA	AAACAGAGAG	GGTGCAGAAA	AAGAGATTTG	GTCACCTAGA	240
CGTGTGGAGT	TGGAGGAGCC	TGTGGGAAAT	CCAGGATCTC	GAG		283

(2) INFORMATION FOR SEQ ID NO:509:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 325 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:509:

GAATTCGGCC	TCATGGCCTA	CTCTCCTTTC	TTAACTTGTG	TACTTGGGGG	CACCTTTTGAT	60
TTTGGTCCCA	CATCATTGAG	GAAGCTGGCC	CAGAGTTCGT	CCTCCTTCTT	TTTCCTGGCA	120
TCCTCTGATC	CAATGCCTTT	TTCTGTCTCT	GCAGCGTCAT	CTTCCTCCTC	ACTACTGCTT	180
CCCTCAGATT	CTGAATTGGC	ATCCTCCTCT	TCCTCTTCTT	CTAATGAGAG	GCCACCTTGT	240
CTTCTCTTCC	TGGCTGGAAT	GCTCTGGGCC	TTTCTTTTTT	TCCCTTGGGT	TTTCTGTGTC	300
TGCTCTTCAC	CATTAGGCCA	TGAAG				325

(2) INFORMATION FOR SEQ ID NO:510:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 281 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:510:

GAATTCGGCC	TTCATGGCCT	AGACAGGAGG	TCATTGGGGA	TTTGAAGG	TTACTGGA	60
TACATTTCCA	TTAAGCTTCA	CGATATCCCA	CAGGTCCATT	CTGTGTGAAA	TGGTCTAAAA	120
ATTTCTGTT	CTCATGCTTC	ATTTTCTTCT	TTAGTAATA	TCCTAATTG	TGTAAATAG	180
TATTTCTTTT	CATTATCTT	AATTATGTTA	TATTAAGATA	TCATGTGTAT	GCTTAAATTA	240
TACTTTTGGG	CTTCAATGA	GTGACCCAC	TCAGACTCGA	G		281

(2) INFORMATION FOR SEQ ID NO:511:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 250 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:511:

GAATTCGGCC	TTCATGGCCT	AATTCCTTG	ACTCAAGACA	GCTAACTTCA	TTTCAGAAC	60
TGTTTAAAC	CTTTGTGTC	TGGTTATAA	AATAATGTGT	GTAATCCTTG	TTGCTTTCCT	120
GATACCAGAC	TGTTCCCGT	GGTTGGTTAG	AATATATTTT	GTTTGATGT	TTATATTGGC	180
ATGTTTAGAT	GTCAGGTTTA	GTCTCTGAA	GATGAAGTTC	AGCCATTTTG	TATCAAACAG	240
CACGCTCGAG						250

(2) INFORMATION FOR SEQ ID NO:512:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 233 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:512:

GAATTCGGCC	TTCATGGCCT	AATTGATTCT	AATCTTTCCC	AAACAGTGCT	GTGGCAATGT	60
ATGAAAGTAA	TAAAAATAAT	CCTTTTCTG	TTAAAAAAA	AATGCTGTT	ACTTGCTGTT	120
TTGTTATGCT	TTTGCTGGAG	ATTTCCAC	CCATCTTAAA	GCAGCAACTT	CAGGATGGGG	180
GAATCAAGCA	AAACCATGGT	GAAGAGATTC	ATTAAAGAG	GACAAGTCTC	GAG	233

(2) INFORMATION FOR SEQ ID NO:513:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 358 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:513:

GAATTCGGCC	TTCATGGCCT	AGTCACCTTT	TGTGGGAACT	TCTCTCAGCG	AAGCGGAGCA	60
TGCGAATTTG	ACATCATGAT	TGTCTGAAAA	TTGGTAAGCC	ACTATCCCAG	AAAGAGCTCC	120
CTATGCCCAG	GGCTTGCAAT	GCTAAGAGAA	GGAGGCAGGA	GAGAGACAGG	GAGCGACACT	180
ACATTTGGTG	GGGTGAGGAT	ATGAGGTTCC	TTGGACATCA	TGGCCTCCAG	TGAATATGTG	240
GGTGATGGCT	TGGAACCTAA	GCTTTTTC	TAGTGCCCCA	CAAAAGAGTA	CCCTCCACAA	300
CCCATCTGTG	GACCACAGCA	GTGCCTCTCA	ACAAACATGT	GCCCCAAGGA	GTCTCGAG	358

(2) INFORMATION FOR SEQ ID NO:514:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 337 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:514:

GAATTCGGCC	TTCATGGCCT	AGAATAGAGG	AAAATAGCCG	CCTGGTGGCT	AGACAATTTA	60
GGTGTAGAAA	ACACATTTAT	ATGGTTCTTT	GAATGTAACA	GTGGTAAAGA	ATATAGGTTT	120
AGTTGTTGCT	GCTAAGTAGG	GGGAAATGAC	ATTTTTATCT	GGTATGTTTG	AGAATAAAGT	180
AAATTTCAAA	ATTTGAGATG	ATCGAAGTTT	TTATTTATAA	ACTTAAGTAT	TATTATAATA	240
TGTTACATAT	TTTATTCTTT	AAAAATTGTA	ATTCAGAGAG	TGTAACAAAA	TGTACTTCCT	300
CACTTTCTTG	CTTTTTGTTT	CCCAGAAGTA	ACTCGAG			337

(2) INFORMATION FOR SEQ ID NO:515:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 366 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:515:

GAAAAGATGG	AAGAAAACCA	CCATAGCACT	GCAGAAGAAC	TACAGGCTAC	TCTACAAGAA	60
TTATCAGACC	AGCAACAAAT	GGTACAGGAA	TTGACAGCTG	AAAATGAGAA	GCTGGTGGAT	120
GAAAAGACGA	TTTGTAGAGAC	ATCCTTTCAT	CAGCATCGAG	AGAGGGCAGA	GCAGCTAAGT	180
CAAGAAAATG	AGAAGCTGAT	GAATCTTTTA	CAAGAGCGAG	TAAAGAATGA	AGAGCCCACC	240
ACTCAGGAAG	GAAAAATTAT	TGAACTGGAG	CAGAAGTGCA	CAGGTATTCT	TGAACAGGGC	300
CGCTTTGAAA	GAGAGAAGCT	ACTCAACATT	CAGCAGCAGT	TGACCTGTAG	CTTGCGGAGA	360
CTCGAG						366

(2) INFORMATION FOR SEQ ID NO:516:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 329 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:516:

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GCGAGTGAGC CGGGGTAGCA TCACCTCACT CCAGCCTAGG TGATGACAGA GTTAGATTTT      60
GTCTCAAAAA AGAAAAAGAA AACAATTCCA GGATTATTAT TTCTACGTAA ATGTGACATA      120
TTATTTCTAT GATATTATTT CTTTGATCTC GTAGCCACAC TGTTCCCAAT AATGATTATG      180
AGAAAAAGTA CCTCTGTGTT GAAGGCAATC ATGGGGAAAA TATAATTCAC AAAGTATTTT      240
AAAATTAAAA TCCTGTGTAT TTCAAAAGAC GATGGTCCTA TTTTAAGAAA AATAACCTTG      300
CAATTCATTT GCTTTTTCAT TGGCTCGAG                                     329

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(2) INFORMATION FOR SEQ ID NO:517:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 368 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:517:

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GAATTCGGCC TTCATGGCCT AGTCCTTTCA AGTACACAGA GAAATTTTGC TTGAATTTCT      60
GGAGGAAGAG TCCAGGGTTC GGGAAAAGGG ACTGGGTGGT ATCTATCTGG GGCCCCAGAC      120
AGCGGCACTT CTTTCTTCTG TGCTGGAATT CGGCGAACAA TCATATCATC TTTTCCAAA      180
TCCGGAAGTA CAAGTTCACC TTCTCTACAC TGTAATAATTA TATCTCGCTC TACAGAATCA      240
TCTTGCTCAG AGAACTTTCT AAAGTCTTCA AAAGCTCGGA GAACATATGG ATTTGCATGG      300
AAAGCCCCAG TCTTTCTGAC AAAGAAATCA TCATTCTCTA AGTCAGGATC CAGGGCTGCC      360
ATCTCGAG                                     368

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(2) INFORMATION FOR SEQ ID NO:518:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 397 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:518:

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GAATTCGGCC TTCATGGCCT ACGCTGAGAT CAAGATTCGG AGTTTGGGCT GCCTAATAGC      60
TGCAATGATA CTGTTGTCCT CACTCACCGT GCACCCCATC TTGAGGCTTA TCATCACCAT      120
GGAGATATCC TTCTTCAGCT TCTTCATCTT ACTGTACAGC TTTGCCATTG ATAGATACAT      180
ACCCTTCATC CTGTGGCCCA TTTCTGACCT CTTCAACGAC CTGATTGCTT GTGCGTTCCT      240
TGTGGGAGCC GTGGTCTTTG CTGTGAGAAG TCGGCGATCC ATGAATCTCC ACTACTTACT      300
TGCTGTGATC CTTATTGGTG CGGCTGGAGT TTTTGCTTTT ATCGATGTGT GTCTTCAAAG      360
AAACCACTTC AGAGGCAAGA AGGCCAAAAA GCTCGAG                                     397

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(2) INFORMATION FOR SEQ ID NO:519:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 640 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:519:

GAATTCGGCC	TTCATGCCTA	CTTTGGTAAC	AGAAGAGAAG	ACTGTGGAGC	CAGCTACCGT	60
CTCAGAAGAA	GCAAAGCCTG	CATCTGAACC	TGCTCCTGCC	CCTGTGGAAC	AGCTGGAACA	120
AGTAGACCTG	CCCCAGGAG	CAGACCCCGA	TAAAGAAGCT	GCCATGATGC	CTGCGGGTGT	180
TGAGGAAGGT	TCATCAGGTG	ACCAGCCGCC	TTATCTGGAT	GCCAAGCCTC	CAACTCCCGG	240
GGCCTCGTTT	TCCCAGGCAG	AGAGCAACGT	AGATCCAGAG	CCTGACAGTA	CCCAGCCACT	300
TTCAAAACCA	GCTCAGAACT	CTGAGGAAGC	CAATGAGCCA	AAGGCCGAAA	AGCCAGACGC	360
CACTGCAGAT	GCTGAGCCTG	ATGCAAACCA	GAAAGCCGAA	GCTGCTCCTG	AGTCTCAGCC	420
CCCAGCTTCT	GAAGATTAG	AGGTTGATCC	TCCAGTTGCT	GCAAAGGATA	AAAAGCCAAA	480
CAAAAGCAAG	CGTTCAAAGA	CCCCTGTTCA	GGCAGCTGCA	GTGAGTATCG	TGGAGAAGCC	540
CGTCACAAGG	AAGAGTGAGA	GGATAGACCG	GGAAAACTC	AAGCGGTCCA	ATTCTCCTCG	600
GGGAGAAGCA	CAGAAGCCTT	TGGAATTAA	GACACTCGAG			640

(2) INFORMATION FOR SEQ ID NO:520:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 469 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:520:

GAATTCGGCC	TTCATGGCCT	AGCAAGAGAA	AGAGAAGTGC	AAACACTCCC	ACGGCGAAGC	60
GCCCTCCGTG	GACGCGGATC	CCAAGTTACC	CAGTAGCAAG	GAGAAGCCCCA	CTCACTGCTC	120
CGAGTGCGGC	AAAGCTTTCA	GAACCTACCA	CCAGCTGGTC	TTGCACTCCA	GGGTCCACAA	180
GAAGGACCGG	AGGGCCGGCG	CGGAGTCGCC	CACCATGTCT	GTGGACGGGA	GGCAGCCGGG	240
GACGTGTTCT	CCTGACCTCG	CCGCCCCTCT	GGATGAAAAT	GGAGCCGTGG	ATCGAGGGGA	300
AGGTGGTTCT	GAAGACGGAT	CTGAGGATGG	GCTTCCCGAA	GGAATCCATC	TGGATAAAAA	360
TGATGATGGA	GGAAAAATAA	AACATCTTAC	ATCTTCAAGA	GAGTGTAGTT	ATTGTGGAAA	420
GTTTTCCGT	TCAAATTATT	ACCTCAATAT	TCATCTCAGA	ACGCTCGAG		469

(2) INFORMATION FOR SEQ ID NO:521:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 202 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:521:

GAATTCGGCC	TTCATGGCCT	ACCCGTTTCC	TCTAGTTTCT	TCCTGTAGTA	CTCCTCTTTT	60
AGATCCTAAG	TCTCTTACAA	AAGCTTTGAA	TACTGTGAAA	ATGTTTTACA	TTCCATTTC	120
TTTGTTGTGT	TTTTTTAACT	GCAATTTACC	AGATGTTTTG	ATGTTATCGC	TTATGTTAAT	180
AGTAATTCCC	GCGGCCTTCA	TG				202

(2) INFORMATION FOR SEQ ID NO:522:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 492 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:522:

GAATTCGGCC	TTCATGGCCT	AAATTTAATG	AAGCAAAATT	CCATACATCA	TTTTGAAAAT	60
AGTGTTCCTT	TCCCTGATAG	GCCTGTTCTG	CATCATTCTT	TTAGCTTCCT	TCTGCCCTGT	120
TTATCACTTG	GTCCCACTTT	TATATTTTTC	CTCTCGGTC	CAGAATTCT	TATTTAGTTT	180
CTTGATTTT	GCCTACTCCC	TCCCTTCTCC	ATGATTACAGC	CTAGTCTTTC	CGTCCTCTGT	240
GGACTTGGGT	GTGCCTTCCT	CTGGGCCACC	TCGCTTTTTC	CTGCTGTTAG	CCCTCCCGCC	300
TGCGCACCTG	CCACTTCACC	CTCGCCTGTG	GTCCACTTAC	GTTCCACTCA	GCCCCGGTCAG	360
TCCTGCTTTG	TTCTTCTCCA	CCGCCTTGGT	CTCCCGTGTG	TCTTATCTAG	CTCTGGTTCC	420
TTCTCGTCTC	CACATTTATT	TTGTTTTCTT	CCTGTGCTTG	TTAGTCCTTG	TGCACTTGGC	480
CCTTTTCTCG	AG					492

(2) INFORMATION FOR SEQ ID NO:523:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 394 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:523:

GAATTCGGCC	TTCATGCCTA	GGAAATTTCA	CCATTTGGTC	TCCCCCTTTG	TGGGTCAGCA	60
GGTGGTCAAG	ACAGGGGGCA	GCAGTAAGAA	GCTACAGCCC	GCCAGCCTGC	AGTCTCTGTG	120
GCTCCAGGAC	ACCCAGGTCC	ATGGAAAGAA	ATTATTCCTT	AGATTGATC	TAGATGAAGA	180
AATGGGGCCC	CCTGGCAGCA	GCCCAACACC	AGAGCCTCCA	CAAAAGAAG	TGCAGAAGGA	240
AGGGGCTGCG	GACCCAAAGC	AGGTCGGGGA	GCCCAGCGGG	CAGAAGACCC	TTGATGGATC	300
CTCACGGTCT	GCAGAGCTCG	TCCCCCAGGG	CGAGGATGAT	TCTGAGTATT	TGGAGAGAGA	360
CGCCCCTGCA	GGAGATGCTG	GGAGGTGGCT	CGAG			394

(2) INFORMATION FOR SEQ ID NO:524:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 600 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:524:

CGATTGAATT	CTAGACCTGA	CCAAAGACCT	TCCGTACAGA	TTGACCGCAG	AATGTCAGGG	60
AAAGTTAGGA	GAAGAAGTTC	TGAGAAGACT	GACTACAGAT	TGGCTGGCCT	GGCTGACCCA	120
GGAACCTCTG	AGCAGACTGA	CCTCAGATTG	TATGGCCTCG	TTGACCACAA	AACATCTGTA	180
AAGACTCACC	ACCAAGTGTA	CGGCCAAGCC	ACTGAACTAG	CTGAACACCA	GGCTATTGAC	240
CAAGCTCATA	GTAATGCTGA	TCAACCTCCA	GTTGACAATG	CTCACTACAC	TGAATCTGAC	300
CAGACTGACC	ACTTAGCAGA	CAGACAAGCT	AATCATAAAG	ACCAGCTGTC	TTACTATGAA	360
ACACGTGGCC	AGTCTGAAGA	CAGAATATTT	CCCCAGTTAG	GCAACAGCAA	AGAGGACAAA	420
GAGGCTGACT	ACAGAGTACA	ACCCTGCAAA	TTTGAGGATA	GCCAAGTAGA	CCTCAATTCC	480
AAGCCTTCAG	TTGAAATGGA	AACTCAGAAT	GCAACCACTA	TCCCACCCTA	CAACCCAGTT	540
GATGCCAGAT	TCACCAGTAA	ATTCCAAGCA	AAAGACCAAG	CTCTTTTCCC	AAGACTCGAG	600

(2) INFORMATION FOR SEQ ID NO:525:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 466 base pairs

- (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:525:

GAATTCGGCC	TTCATGGCCT	ACTTTCTTCT	GCTGGCTTCC	ATCTTGCCAC	ACTTTCTTGC	60
TCTTCCTTCT	AACTGAAAGA	CTACTTCTCC	ATCCCCCTCTG	CAGGCTCTTT	TGCTCCACCT	120
GATATTTAAA	TGTTGGAATG	CCTAGAGTTG	TTCTGACCCT	TCTTTATCTA	CCCCGATTTC	180
CTCAGTGATC	TTATGCAGAG	GTCTCCCAAA	GTTTACATGG	CTATCCTTGA	CCTCCTTCCT	240
GAAGTGCAGC	TGGTGTGAGC	TGCCGTCACT	TGGATGTTTA	ATCAGCAACT	CAAGGTTTAC	300
GTGATGATTA	GACCGCAGTT	ACCCCCAGAC	TTCCTTATCC	CTTAGTTTTT	CCCATCTCAT	360
TAAGTTCACT	TCCATTCACC	TTCTTGATGA	AGCCAAGTAT	TTCAGAACTA	GCCTTGTTTC	420
TTCTTTTTC	CTTTCCCCCA	TATCAATTCC	AGACTACCCA	CTCGAG		466

(2) INFORMATION FOR SEQ ID NO:526:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 559 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:526:

GAATTCGGCC	TTCATGGCCT	ACATTGTAGA	AGAGATCACA	GAAACCACAA	AAGGTTTCT	60
GAAGTATATG	GATAATCAAT	CATTTGCAAC	TGAAAGTCAG	GAAGGAGTTG	GTTTGGGACA	120
TTCACCTTCA	TCCTATGTGA	ATACTAAGGA	AATGCTAACC	ACCAATCCAA	AGACTGAGAA	180
ATTTGAAGCA	GACACAGACC	ACAGGACAAC	TTCTTTTCT	GGTGTGAGT	CCACAGCAGG	240
CAGTGAGCCT	GGAAGCCTCA	CCCCTGATAA	GGAGAAGCCT	TCGCAGATGA	CAGCTGATAA	300
CACCCAGGCT	GCTGCCACCA	AGCAACCACT	CGAAACTTCC	GAGTACACCC	TGAGTGTGTA	360
GCCAGAAACT	GATAGTCTGC	TGGGAGCCCC	AGAAGTCACA	GTGAGTGTCA	GCACAGCTGT	420
TCCAGCTGCC	TCTGCCTTAA	GTGATGAGTG	GGATGACACC	AAATTAGAGA	GTGTAAGCCG	480
GATAAGGACC	CCCAAGCTTG	GAGACAATGA	AGAGACTCAG	GTGAGAACGG	AGATGTCTCA	540
GACAGCACAA	GGCCTCGAG					559

(2) INFORMATION FOR SEQ ID NO:527:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 318 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:527:

GAATTCGGCC	TTCATGGCCT	ACGCAGTGGT	TCAATTTTCT	TCGAAACGGT	GTGGTCCCTG	60
CAAAAGGATG	TTTCCTGTTT	TCCATGAGCT	GGCTGAAACT	TGTCACATCA	AAACAATACC	120
CACATTTTCA	ATGTTCAAGA	AAAGCCAGAA	GGTAACCTTA	TTCTCAAGAA	TCAAAAGAAT	180
AATTTGCTGT	TATAGAAGTG	GATTCATGAG	CAACCTGATT	TTTGAGTTT	GTGGAGCCGA	240
TGCTAAAAAA	TTGGAAGCCA	AGACTCAAGA	ATTAATGTAA	GCTGATCTCC	AAGGCAAAAT	300
ACACTTGTGC	CGCTCGAG					318

(2) INFORMATION FOR SEQ ID NO:528:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 276 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:528:

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GGCACAGACT TACCGGACAC ACAGGTCATG GGACACAGAG TCATGGGGCA CACAGGTTCA      60
CAGGGCACAC AGGCTCACGG GACACAGAGT CATGGGACAC ACAGGCTCAC AGGGCACACA      120
GGCTCACAGG ACACACAGGT TCATGGGGCA CAGAGTCATG GGGCACAGAC TCACAGACTC      180
ACAGGTCATA GACGCTCATG GGGCGCAGGC TCACAGGGCA CACAGACTCA GGGCACACAG      240
GCTCATGGGG CACAGAGTCA TGGGGCAGGG CTCGAG      276

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(2) INFORMATION FOR SEQ ID NO:529:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 180 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:529:

```

GAATTGGGCC TTCATGGCCT ATTCTGTTCT TTAAATTTGA ATGAAAGTTT GGCATTTTAA      60
AAAACTTTAG GTGATTTAGG AGTATAATTT TAAGCAGATT TTAGAGTAC GAGTGTCCAC      120
ATATTTAACT AAACATTCAA AAATTAGTTA AAATCAATGA ACTTGGGAAG GATCCTCGAG      180

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(2) INFORMATION FOR SEQ ID NO:530:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 470 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:530:

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GGGGACAGAA GATGTGCTCC AGGGTCCCTC TGCTGCTGCC GCTGCTCCTG CTA CTGGCCC      60
TGGGGCCTGG GGTGCAGGGC TGCCCATCCG GCTGCCAGTG CAGCCAGCCA CAGACAGTCT      120
TCTGCACTGC CCGCCAGGGG ACCACGGTGC CCCGAGACGT GCCACCCGAC ACGGTGGGGC      180
TGTACGTCTT TGAGAACGGC ATCACCATGC TCGACGCAGG CAGCTTTGCC GGCCTGCCGG      240
GCCTGCAGCT CCTGGACCTG TCACAGAACC AGATCGCCAG CCTGCCCAGC GGGGTCTTCC      300
AGCCACTCGC CAACCTCAGC AACCTGGACC TGACGGCCAA CAGGCTGCAT GAAATCACCA      360
ACGAGACCCA GGCCCTTCAG CACCGTTCAC AGTATTTTGA AGGTGTTGTG AAGTGCAATA      420
AGCTGGAAAT ACTGGAGACC ATCGTGGACA GAATAGTAAG AGCCCTCGAG      470

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(2) INFORMATION FOR SEQ ID NO:531:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 553 base pairs

- (B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:531:

GAATTCGGCC	TTCATGGCCT	AGAAAATTCC	AGAAAGGATA	TTTAAGAAAA	TACAATAAAC	60
TATTGGAAAG	TACTCCCCTA	ACCTCTTTTC	TGCATCATCT	GTAGATACTA	GCTATCTAGG	120
TGGAGTTGAA	AGAGTTAAGA	ATGTCGATTA	AAATCACTCT	CAGTGCTTCN	TACTATTAAG	180
CAGTAAAAAC	TGTTCTCTAT	TAGACTTTAG	AAATAAATGT	ACCTGATGTA	CCTGATGCTA	240
TGGTCAGGTT	ATACTCCTCC	TCCCCCAGCT	ATCTATATGG	AATTGCTTAC	CAAAGGATAG	300
TGCGATGTTT	CAGGAGGCTG	GAGGAAGGGG	GGTTGCAGTG	GAGAGGGACA	GCCCACTGAG	360
AAGTCAACA	TTTCAAAGTT	TGGATTGTAT	CAAGTGGCAT	GTGCTGTGAC	CATTATAAT	420
GTTAGTAGAA	ATTTTACAAT	AGGTGCTTAT	TCTCAAAGCA	GGAATTGGTG	GCAGATTTTA	480
CAAAAGATGT	ATCCTTCCAA	TTTGAATCT	TCTCTTGAC	AATTCCTAGA	TAAAAAGATG	540
GCCTTTGCTC	GAG					553

(2) INFORMATION FOR SEQ ID NO:532:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 843 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:532:

GAATTCGGCC	AGAGAGGCCT	ACTTCTCTTA	GTGATTTTCAT	GTTTCAACCA	GTACATTGTG	60
GTGAATACTG	AAATATCTTG	TTTAATTCAG	ATAATTAAAA	TGGTGGCAAA	GGAAGCTGTT	120
TAGCCAGAGC	CCTTCTTGAC	TTTGAGGAAC	AGTGGTAGTA	TAAGACTTGA	AGACAGACGT	180
GTAAAAAGTA	CTACTCACTG	GTAGGCTCAG	GTCTGGTTGA	TTGACTGATT	CTTGAGACGG	240
AATGTCGCTC	TGTCGCCTAG	GCAGGAGTGC	AGTGGCCCG	TCTCGGCTCA	CTGCAGCCTC	300
CGTCTCCGGG	TCCAAGCGAT	TCTCCTGCCT	CAGCCTCCCG	AGTAGCTGGG	ACTACAGGCG	360
CCCCGCCACCA	CACCGGGCTA	ATTTTGTAT	TTTTAGTAGA	GACGGAGTTT	CACAAATATTG	420
GTCTCGAACT	CCTGACCTCA	GGTGATCCAC	TGCGCTGGCC	CACCCAAAGT	GCTGGGATTA	480
CAGGGATGAG	CCCCTGCGCC	TGGCCTCGGT	TGAATTTATT	AAACAACTTT	TGTGGGCAGC	540
AAGCTGTACG	AGGTTAACCTA	TGTGATGAGA	AGACTTAGAA	ATGGAGAAAA	GTTTATCAG	600
TTCTACATAG	GACTTAGTTT	GGGAGTTTCT	GGAACTACG	TTGGAAATCA	GTAGTTGCAC	660
ACTAGCTGAA	TTCAAGCTGTG	TAATTTACAG	TGATTTGTTA	TTTACCAAAT	AAGTAGAAGA	720
GGGAATTAAG	AAGCTAAAAT	CTCTGGGTAC	TTGTTTGATA	TGAATTTGTT	AATTGTTTAT	780
ACTCAGGTAA	TAAGTGTTAC	CTCAGTCATA	GCATTTAATA	TTTTATCTGA	CTGTCCTCTC	840
GAG						843

(2) INFORMATION FOR SEQ ID NO:533:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 525 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:533:

GAATTCGGCC	AAAGAGGCCT	ACATCCAGAA	ATTTAGGGAC	TCAGCCCTGG	TCAGGGTGGC	60
AAAGGGTCTG	TTTGTCTTTC	CCCATTAGAC	AGAGGTCTTG	TCCTGCTACC	CTAATTGTAA	120
AGGGGTGCCT	GGGAAGGGGT	GGTAGGGACA	TGGTGGCGGT	GGAGACTCCG	GCCCCACTTC	180
TCCAGGCTTT	GCTGACAGGG	GCCTGCTTTT	AATTTTATT	TTTATTCCAT	GACTTTTAA	240
AAAAGAATCC	CGTAACTTCT	TTTTCATAAC	TTTTTTTGTA	ACTTTTCATA	ATACTGTTTT	300
CTACTTTGTT	CCCACAAGTT	TTTTTGCCAC	AACGTTTTTA	CATTTTTTAT	CCCATAACTT	360
TTTCACCCCA	TAACTTTTTT	AAATAAAGTT	ATTTAATAAA	ATAACTTTTT	ATAAACTTT	420
AATAAAAGTT	TTTTAATTAA	CCCATAACTT	TTTTATTTTG	GTTTTTAATA	AACACTTGCA	480
TAGTTATATT	ACAACTTTGT	AAAAATGAAA	CACATTATCT	CAGGC		525

(2) INFORMATION FOR SEQ ID NO:534:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 268 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:534:

GAATTCGGCC	AAAGAGGCCT	AGAAAACCCT	TGAAGACATG	TTGAAAATAC	ATACTCCTGT	60
TAGCCAAGAA	GAAAGATTGA	TTTTCTTAGA	CTCCATTAAG	TCCAAATCCA	AAGACTCTGT	120
GTGGGAAAAA	GAAATAGAAA	TACTTATAGA	GGAAAATGAG	GACCTCAAAC	AACAATGTAT	180
TCAGCTAAAT	GAAGAGATTG	AAAAGCAAAG	GAACACTTTT	TCATTGCTG	AAAAAACTT	240
TGAAGTTAAC	TATCAAGAGT	TACAAGAG				268

(2) INFORMATION FOR SEQ ID NO:535:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 224 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:535:

GGCTTGACCC	TCGGCGATCC	CCGACTCCCT	TCTTTATGGC	GTCGCTCCTG	TGCTGTGGGC	60
CGAAGCTGGC	CGCCTGCGGC	ATCGTCCTCA	GCGCCTGGGG	AGTGATCATG	TTGATAATGC	120
TCGGAATATT	TTCAATGTC	CATTCCGCTG	TGTTGATTGA	GGACGTTCCC	TTCACGGAGA	180
AAGATTTTGA	GAATGGCCCC	CAGAACATAG	ACATTCCTCT	CGAG		224

(2) INFORMATION FOR SEQ ID NO:536:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 303 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:536:

GAATTCGGCC	TTCATGGCCT	ACCACTCTGG	CCCCAGCGTC	ACTGGCCTAG	GGACACATGG	60
GGGTGGGGAT	TGTTTGGCCT	TCCTGGCTTA	GGTCTCTGGA	AGAGAGAAGA	ACCCCATGGG	120

GCAGACCCAG GCCACGGGCA GTACATGCCT CCCACACTAC TGACACCGCC AGTGTCTTCT	180
GTGAAGCCAC CTTTGAGCAA CGGAAAGGAA GGGGGATGGG CAAGATCAGT GCAAGGTTGG	240
CCAAAAGCCT GGGGCTGGCC TTCTGCTGGC ATGAGAGGGC CAGGCCGCCC CCAGCTCCTC	300
GAG	303

(2) INFORMATION FOR SEQ ID NO:537:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 350 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:537:

GAATTCGGCC TTCATGGCCT AGAACAAAAT CTGAAATTCA GAAATAAACA ACAGTTGGAA	60
AATATTTTCC ATTTTTCCTT CTATTAAATA TGATAATTTT AGGTGCAAAG AGTGTCTTTT	120
TTTTTTTTTT TTTCTCCACA GTGCTTTTCA CGGTGGGGAC TAATGGATAT AGAGGGTGGG	180
AGGCCAGAAT AACCAAGTAC CTGGAAGTGA ATCTTTGTGG AGATAATGAA ATAATTTTAT	240
TCGAAAGGTG CAAAAGGAAG TCTTCCATCA CTAGCTCAGC TGTATGGTC CTTGAACTGC	300
CCTTGCCCGT CTGTCTTTT ATTAACTCTT TTTACCTGTC GAGTCTCGAG	350

(2) INFORMATION FOR SEQ ID NO:538:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 344 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:538:

GAATTCGGCC TTCATGGCCT AGAGTTGCAC AGATGTCTTT TGTTAGCTTT GGTGGCGGAG	60
TCATCCTCAC AGACCGTTAC TCAGATAATT AAGTGCCTTG CAAATTTAGT ATCAAATGCA	120
CCTTATGATC GTCTAAACT CAGCCTGCTG ACCAAAGTCT GGAACCATG AAAGCCTTAT	180
ATTCGCCACA AAGATGTTAA TGTTCTGTGT TCAAGTCTCA CACTCTTGGG AGCTATAGTG	240
TCCACCCACG CACCTTTACC TGAAGTCCAA CTACTTCTGC AACAGCCATG TTCTTCTGGA	300
CTCGTAATA GCAATTCAGC AACCCCTCAC CTCAGCCCCT CGAG	344

(2) INFORMATION FOR SEQ ID NO:539:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 343 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:539:

GAATTCGGCC TTCATGGCCT ACAACTCCAT TAAACCACCA CCAGCTCCCC AAGCCACCCC	60
TTCAGCCATG AAGTTCCTGC TCCTGGTCTT GGCAGCCCTC GGATTCCTGA CCCAGGTGAT	120
CCCAGCCAGT GCAGGTGGGT CAAAATGTGT GAGTAACACC CCAGGATACT GCAGGACATG	180
TTGCCACTGG GGGGAGACAG CATTGTTCAT GTGCAACGCT TCCAGAAAAT GCTGCATCAG	240

CTACTCCTTC CTGCCGAAGC CTGACCTACC ACAGCTCATC GGTAACCACT GGCAATCAAG 300
GAGAAAGAAC ACACAAAGGA AAGACAAGAA GCAACCCCTC GAG 343

(2) INFORMATION FOR SEQ ID NO:540:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 248 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:540:

GCGATTGAAT TCTGAAGACC TCTCAGCCTC TTATGACCAC TCCTGGCACC CTGTCAAGCA 60
CAGCATCTCT GGTCACCTGGC CCTATAGCCG TACAGACTAC AGCTGGAAAA CAGCTCTCGC 120
TGACCCATCC TGAAATACTA GTTCCTCAA TCTCAACAGA AGGTGGCATC AGCACAGAAA 180
GGAACCGAGT GATTGTGGAT GCTACCACTG GATTGATCCC TTTGACCAGT GTACCCACAA 240
ATCTCGAG 248

(2) INFORMATION FOR SEQ ID NO:541:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 433 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:541:

GAATTGGCCT TCATGGCCTA GATTGTCTTT ATAGGAAATG TCTTTAGCAA AATACTACGG 60
GTTCTATAAA ACCCATTAAC GGGTTATCAG TGTCTAGGAC ATAAATGGCT TCTGGTAAGA 120
AAATTAAGGT CTACTCTCCC TAAATACTAT CATAATTACA AAGGTTAAGA AAAAAGAAGT 180
AGAGTAAAAC ATGTGTCCCT TAAAAATCAA ACATGAGTGG TCACAAGGTC CTAAGAAGCA 240
GAGAATGAGA ACTCCAGTTG CTTGTTTATC TCTCAGGCTG AGCATGGTTG GTTACAATGA 300
GGGGTAGCAG GAAGAGCACA GCCTTGGACT CCAGTCCAAG GAACTCCAGT CTCTCCTGCA 360
ATTTCCAGT GTTTGACCTT GGGCCACTTA CTGTTCTTT CTCAGCCTCC ATTTTCATAT 420
CTAAACCTC GAG 433

(2) INFORMATION FOR SEQ ID NO:542:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 493 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:542:

GAATTGGGCC TTCATGGCCT AGACACGGGA CATAAAACT TTTAATGAAG GAGGACACAG 60
CTCAGAGCCC TTCCACATGC GGCCCAACCC TGCCCCACGG AGACCGGCCA TGGCAACCGC 120
TCAATCAGAA GGTGTTCTTG ATGCGGCCGG CCACCAGCCT AAGGATGTCC CCGATCTTCT 180
TCTGCCAGTT GGCGATGTCC TTGGACACGG CGCACCACAG CTCCCCATGC CGAGGCTCTG 240
CACTCTCACA GCGCTTCCTC ACCTCCTCCT GCTGCTCCTC AGTGCCATGC TGCAGCTCAA 300

ACTTGTAGAA GAAGGCCAG GCATCCCCCA GGTCCGAGTC AATCTTCACA GTGCGGTGGA	360
ACCACTCCCT GGCCTTGGTG ATCTTCCGCT GACTCCAAAA CAGCTTGGCC ACGGCCAGGA	420
GCACATGGGG GTCATGCTCA CACTTCTTCA GGGCATCCAC GCTCTTGGTC CTCCTCTGGG	480
GCCTTGCCCTC GAG	493

(2) INFORMATION FOR SEQ ID NO:543:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 325 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:543:

GAATTCGGCC TTCATGGCCT AGTCAGGGAG AAGGGAAGGT GAGAAGGGGG GGAAAAAAGA	60
AGCAAAAAGC CCAAAGAAAA AAACATTTTA TATTCATCTG TATAAACATA TCCGCTAAGG	120
CAACGCAAT CCGGGTCCGA GGCTGCTCGG CTGGGCTCGG TGCCTCCTAA TTCTGCAGA	180
TTCTAAGGCC AAAAAATAAA ACCTCTGCAA GTCCGCGTAG CTTCAGGAC TCCTGGGCAT	240
TTTACTAAAA TAAAGAGTTA TCGAGTTTAA AAAGCAGTGA CGTCGTTATG ACACACACTG	300
AAAGTTGCAT AACTGTGGCC TCGAG	325

(2) INFORMATION FOR SEQ ID NO:544:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 473 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:544:

GAATTCGGCC AAAGAGGCCT AAGAATTCCT TATGAAAGTG ATGCTTGAGT CAAAATATGA	60
TGGATGAAGA GAGTTTAAAT AGATTACATA GAATTTTAA TAATGTCGAT TGGTTATATA	120
CTGGGCACTG ATAGCTGATT TTTCTTTGGG GAAAGGTATG TCAGCCTAGT CATTGAGATT	180
CCTTTATTTT TTAAATGTT TTTTCATTTT TTGCTTTGCA TTGCATTCAT TTGCTGAAGA	240
GCTGGCTTGT ACTTTGGCAG GTGTCATACT TGGTTATTCT CCTTAGGATA TTGGCCCAAC	300
AATCTGGGAT TTGTGAAAGG CGCTTCGCTT TTCAGACCTG GGCGTCTGTA TCATGACTAT	360
CATAAATTTA GGATTAAGAC ACCTAGCCTC CTACCAGGAT GAATGAGGTG TCCATGTGAC	420
CTGCTGTGCC CTGGAATTTT ATACATCTTT CTCTCATAGC ACACGGACTC GAG	473

(2) INFORMATION FOR SEQ ID NO:545:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 120 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:545:

GAATTCGGCC AAAGAGGCCT AGTCGAGAAG GAAGAGGGAA GAAGAAAAAC TATAAAAGTG	60
TGCTAAATGT TTTATTTTCT CTGGAAGAAT AGTTATATTC TACTCTTTGT GGCTCTCGAG	120

(2) INFORMATION FOR SEQ ID NO:546:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 481 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:546:

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GCTAGACCTG CCCCTTAGA AATGGAAAAA GCATGCAAGA GAGATGTTAA AGGAGACTAT      60
TGGAGCAACT GTGTCCACAC CCTCTGTGAT AGAAATGGAA AAAATATCCC CAGAAGATCG      120
TGGTGAGAAT ATTGGGAAAC ACAAAGTGTT ACCCGCAGTG GTAGACATTG AGAAAATACA      180
TGGAACAGGA CTAGAATTGA CCACTAAACA AGGGGAGGCC ATGCTTCCTG CATTGAAAG      240
TAAACACCA CAAGAGTATG CTGAAGGGAG TGTGAAGAA ACAATGGAAA ATACTTACCA      300
AAAGGATGCT GAAGGGGATA TTGGAAGGCC TGAAGTGATG CCTGTGAGGT TAGAAATGGA      360
AAATACTTAC CCAAAGGATA CTGAAAGAGA CGGTGGCAAA ACTGAGGTGA TGCCCTTGC      420
ATTAGAGGTA GTAAATACTT ACCAAAAAAA TGCCAAAGGT TTTACCGGGA ACAATCTCGA      480
G                                                                                   481

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(2) INFORMATION FOR SEQ ID NO:547:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 405 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:547:

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GAATTCGGCC AAAGAGGCCT AGAAACCTGA GGCTGCTGCC CTTTATCTGC CTTACGGTA      60
CTGTCCCCTT CCCCAGCTC CTCCCTGACC CCATGGGCCA GGCCTCAGAC CTTCCAGCTA      120
ACCGCTTCCC ATGAGCCACT ACTCTGATGT CAGCCTATAA CCAAAGGAGC TGGGGGGTCC      180
AGGCCTGGTG ACCAACCTTT CTCAGCCCAC TCAATCAGGG TGCTCCCCAC CTGCAGGCAG      240
GAGGCAACAC CCTATCTGCT ACCATCAGCC CCTTCCAGAG CCCATCTGCC CCGCCCAGCC      300
CTGCCCTGCC CAGCCATACC CTGCTCTGCC CCATCTGGGG GTGCCCTGCT CAGGGATGGG      360
CTGGCAGGGC TGTACCCAGC CTCCCTGGTA AGCAAAGAGC TCGAG                                405

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(2) INFORMATION FOR SEQ ID NO:548:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 142 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:548:

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GCGATTGAAT TCTAGACCTG CCTCCCTGCT TTCTAATAAA TCTGACTAAC CTTAGACATT      60
TTGTATCTTA CTAAGAACAT CCCTTCAATA TCTACTTCAT TATCCCATGC CATTTCCCCA      120
CTGTCTCAAC ACGAATCTCG AG                                                                                   142

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(2) INFORMATION FOR SEQ ID NO:549:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 296 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:549:

GAATTCGGCC	TTCATGGCCT	ACTATGGTAT	TGCTAAACAA	GGGTGGGAGG	AGAGAGAGGT	60
AATCAGGGAG	GACTTCCCAC	AGGAGGTGGC	ATCTGCAGAT	GTCTCAAAAA	AGAAAAGAAT	120
TAGCCTGGCA	AGAGGTGAGG	ATTGTGTAGA	GGTCACTCAC	TTTCCTTG TG	GGTGGAGGAA	180
ACCATTCAG	GAGCTGTAGG	AAGCTTGGTG	CTGGTGAAGG	AGGCAGGAGA	GGAGAGAAGA	240
GGAGATGACC	TTAGAAATCA	CATCCAAGAG	CCTCTGATCC	CAGGAGGCAG	CTCGAG	296

(2) INFORMATION FOR SEQ ID NO:550:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 254 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:550:

GCAGGAGAGA	AAATTGAGGC	TTAGGTTAAG	AACTTACCC	AAAGTCAAAC	AATTTAATTG	60
GTTTGGGAAG	ACCAGGAAGA	CTTTAAGTTC	CTAAGATCGT	TTGAGATTCT	GCATCAGGGA	120
ACACTTGACA	GCAGGTTTAT	ACAAAGACAG	ATTTGGTATC	TTTGGAGGGA	ATGAGTTTCC	180
AGTCATTGCA	GGTGGTCCAG	CAGAGAGGGC	CACTCTCCTT	TTTTTCTTTC	TTTACTCCCT	240
TTTTGATTCT	CGAG					254

(2) INFORMATION FOR SEQ ID NO:551:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 278 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:551:

AGGCCATGAA	GGCCCTTTCC	ATTTCTTTTT	GTTCCATCAC	TCTTCTCTCA	ACCTGTGTTT	60
CTTTTTTTAC	TGAGGAGTTA	GTCCCCATTA	GTTCTTGAT	CACATTTTCA	TTGCACGAC	120
ATTACTCGCA	GGTGGTGGG	AGCCTGGGCT	TTTGGGGAAC	CAGGCTGCTC	TGGTCCCCAG	180
CATTGCCTCC	TCCTAGCCCC	TCTAGTCCAG	TTTGCCTCCC	TTACCCTCAT	TTCCAAACC	240
TCTTGATCCC	TCCTCTCCCT	CCCCAGCTG	GCCTCGAG			278

(2) INFORMATION FOR SEQ ID NO:552:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 322 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:552:

GAATTCGGCC	TTCATGGCCT	ATGCACTTCT	TCTTTCTCTC	CTCCTTTTGC	TGGGTGCTTA	60
CCGAGGCCTG	GCAGTCCTAC	CTGGCTGTCA	TTGGGCGGAT	GCGCACCCGC	CTCGTTTCGCA	120
AGCGCTTCCT	CTGCCTGGGC	TGGGGTCTGC	CTGCCCTGGT	GGTGGCCGTG	TCTGTTGGCT	180
TTACCCGAAC	GAAAGGATAC	GGTACATCCA	GCTACTGCTG	GCTCTCCCTG	GAGGGCGGCC	240
TGCTCTACGC	CTTTGTGGGC	CCTGCAGCCG	TCATTGTCCT	GGTGAACATG	CTCATCGGAA	300
TCATCGTCTT	CAGCAGCTCG	AG				322

(2) INFORMATION FOR SEQ ID NO:553:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 390 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:553:

GCCAAAATCA	AGCAAAGTAT	GAAGAAAGAT	AAAGAAGGGG	AAGAAAAAGG	GAAGCGAAGA	60
GGATTCCCCA	GCATCCTGGG	ACCCCCACGG	AGACCAANCC	GTCATGACAA	CAGTGCAATT	120
GGCAGAGCCA	TGGAAGTACA	GAAGGCGCGC	CACCCTAAGC	ACTTATCCAC	ACCCTCATCT	180
GTGAGTCCTG	AACCTCAGGA	CTCTGCCAAG	TTGCGCCAGA	GTGGGTTAGC	AAATGAAGGA	240
ACAGACGCTG	GATACCTGCC	TGCCAATTCC	ATGTCTTCTG	TAGCTTCAGG	GGCCTCTTTT	300
TCCCAGGAAG	GAGGGAAAGA	GAATGATACA	GGATCAAANC	AAGTTGGAGA	AACATCAGCA	360
CCTGGAGACA	CCTTAGATGT	CACCCTCGAG				390

(2) INFORMATION FOR SEQ ID NO:554:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 306 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:554:

GACGGCTACA	CCATGGGCCG	GCTGCTGCGG	GCCGCCCGGC	TGCCGCCGCT	GCTTTCGCCG	60
CTGCTGCTTC	TGCTGGTTGG	GGGAGCGTTC	CTGGGTGCTT	GTGTGGCTGG	GTCTGATGAG	120
CCTGGCCCAG	AGGGCCTCAC	CTCCACCTCC	CTGCTAGACC	TCCTGCTGCC	CACTGGCTTG	180
GAGCCACTGG	ACTCAGAGGA	GCCTAGTGAG	ACCATGGGCC	TGGGAGCTGG	GCTGGGAGCC	240
CCTGGCTCAG	GCTTCCCCAG	CGAAGAGAAT	GAAGAGTCTC	GGATTCTGCA	GCCACCACCA	300
CTCGAG						306

(2) INFORMATION FOR SEQ ID NO:555:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 327 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:555:

GAATTCGGCC	TTCATGGCCT	ACCTCTCAC	GCCACCCCG	CCCCACCGG	GCTGCAGGTG	60
CTGCTGATGC	GCTGGGATCT	GATTGAGGAT	AAAAAGGAAG	GAGAGATGAC	CCCTACCCCC	120
TCATCCCCCA	GTTTGAAAA	GGTCTAAGCA	AGTGAGTCTG	GTGGAGGAGC	TGAGGGAGGG	180
AGCCATGGAA	GGTGCCAGAA	GGAAGGTTGG	CGGGGGCACG	TGTGGGCCGT	GGCTTGGGCT	240
GGTCAGAGTG	GCGTGAGCTG	CCCGGCGCCT	GCCCTGCCCA	AGTGACCAGG	GAAGTGTGTG	300
TGTGTCCATG	TGTATGCGTG	GCTCGAG				327

(2) INFORMATION FOR SEQ ID NO:556:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 272 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:556:

GAATTCGGCC	TTCATGGCCT	AGAGAAGGAG	CCAGCTGGGG	CCGAATCCAT	CCGCTTGAAC	60
ACCAAAGAAG	ACAAAAATGG	TGTCCCCGAC	TTAGTGGCCC	TGCTGGCTGT	GAGAGACACC	120
CCGGACGAGG	AGCCGGTGGA	CAGCGACACT	TCGGAGAGCG	ACTCGCAGGA	AAGTGGGGAC	180
CAAGAAACAG	AGGAGTTGGA	TAATCCTGAG	TTCGTGGCCA	TTGTGGCCTA	TACCGACCCG	240
TCGGACCCCT	GGGCCCCGAA	GGAGAACTCG	AG			272

(2) INFORMATION FOR SEQ ID NO:557:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 280 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:557:

GAATTCGGCC	TTCATGGCCT	ATTTCCGATC	TATGTATCTG	TACTCATACA	GCCTCATCGG	60
GCTAAACAGC	CTTCTTTTCA	GAACAGTAGA	TCACTCAACT	GGGTTTTCAA	GTGACTGTTT	120
ACCTTTCAAG	GCTGGCTTTA	TAGGTCTTGC	CTCACTGTAT	CCAGCAATCC	AAACTTTACC	180
CTATCCAGT	CAGGACTGCA	CACCTCATAT	TGAAAGACAT	ACCTTAGAAC	CAGACTCCCC	240
AAACCTTACA	AATATCCAC	CCTTGACTCC	CGTTCTCGAG			280

(2) INFORMATION FOR SEQ ID NO:558:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 474 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:558:

GCAATGGTCT	CCAGGATGGT	CTCTACCATG	CTATCTGGCC	TACTGTTTTG	GCTGGCATCT	60
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GGATGGACTC	CAGCATTTC	TTACAGCCCC	CGGACCCCTG	ACCGGGTCTC	AGAAGCAGAT	120
ATCCAGAGGC	TGCTTCATGG	TGTTATGGAG	CAATTGGGCA	TTGCCAGGCC	CCGAGTGGAA	180
TATCCAGCTC	ACCAGGCCAT	GAATCTTGTG	GGCCCCCAGA	GCATTGAAGG	TGGAGCTCAT	240
GAAGGACTTC	AGCATTTCGG	TCCTTTTGGC	AACATCCCCA	ACATCGTGGC	AGAGTTGACT	300
GGAGACAACA	TTCCTAAGGA	CTTTAGTGAG	GATCAGGGGT	ACCCAGACCC	TCCAAATCCC	360
TGTCCTGTTG	GAAAAACAGC	AGATGATGGA	TGTCTAGAAA	ACACCCCTGA	CACTGCAGAG	420
TTCAGTCGAG	AGTTCCAGTT	GCACCAGCAT	CTCTTTGATC	CGGAAACACT	CGAG	474

(2) INFORMATION FOR SEQ ID NO:559:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 290 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:559:

GAATTCGGCC	TTCATGGCCT	AATTTTTTTG	TTGTTGTTTC	CTTTTGTAT	TTTACTGATA	60
TCACCAGGAT	AGTTTACTCT	CCTTCTAGCT	TTCTGCTTAC	CGCACACTGG	ATAACACACA	120
CATACACACC	CACAAAATG	CTCATGAACC	CAATCCGGAG	AAGGTTCCAG	CAGGTCCCCC	180
ACCTCCCTCT	CCTCCTCCTA	CTTCTCCTCT	TGACAGCGAG	GACAGGAGGG	GGACAAGGGG	240
ACACCTGGGC	AGACCCGCCG	GCTCTCCCCC	CACCCACCC	CGTCCTCGAG		290

(2) INFORMATION FOR SEQ ID NO:560:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 361 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:560:

GTGTATGTGG	GGGTAAGTG	TGTGTGTGTG	CGTGTGCGTG	TATGTGCACG	TGTTGTGTGT	60
GTGCGCCTGC	ACACGGAGAG	CCCACTCATA	CGTAGCAGAA	AATCAAATGG	CCCCAAATCA	120
GAAACATGGC	GCATGTGAGC	ATGCCACTTC	TTGTGTGCCT	GTGACTGTTC	AGAATGTACA	180
CGGCCCTGCA	GCTCCCGAAG	GCCAGCTCTG	CTGCAACCCC	TCCTCTGTCC	AACACAGTCC	240
TCACTGGTGT	CTTTTCCTCT	TCAAATCTAC	AGCATTCTCTG	ATCTCTGCAA	ACAAATTTAAC	300
CCAAAACCAA	GTTCTGGCTG	ACAAGGCTAC	ATCTTGTTTC	TTGTGCGTGA	TTAGCCTCGA	360
G						361

(2) INFORMATION FOR SEQ ID NO:561:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 381 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:561:

GTTCTAGACC	TGCCTCGAGA	TATGCCGGAA	GGTTGCATGG	CTGGTCCCAG	GGCCAGCACA	60
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GGCCCGAGGC CGGGCTGCCT GGTTTTATTT TTATTTAACT TTATTTTCTG TTTTATGAGT 120
GTGTGTCCGC CCACCCCCAC CCCCTTCAGT GTTAAGTGGG GAGCCCTGGG GGAGTCTCTC 180
CTGCCTCCCA GCCTCTCCA AGACCTCCCC CCTCGTCACC AGCCATCCCT CTGGACCAGG 240
CAGAGGGCGG ACCGGGTGGG CAGGGGCCCTG AGGGTGGCTC GGGCCAGCCC ACCAGCCAAT 300
GGACCCCTCC TCAGGCCGCC AGTGTGCCCC TGCCCTTTT TAAACAAAA TGCCCTCGTT 360
TGTAACCCCT TAACGCTCGA G 381

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(2) INFORMATION FOR SEQ ID NO:562:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 317 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:562:

```

GCACTCATAA AAATCTTACT CAGAAATCTT CAGAGGTTTG CTAAGGATAC AATTTGATTG 60
TTACACATTT AATGCTCACC AGCTGCTTAG GCCCACACCA TTTATCCACC CTGATTGCT 120
ACTGCTCTTT GAAATACAAC CAGTGTTC A GCCAGACTGT TTTCTGCTT CTGCTCCCCT 180
TCTCCTCCTC CCAGCACATC TGTGAATTCT TTGACTGGTT TACCACTCCC AACTCCTCC 240
CCAGCAATGC AGATCTTCTA CACCCTTTAG GATCTAAGCT AAGTCTGCTT CCCAGATATC 300
CTCCCGAACA GCTCGAG 317

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(2) INFORMATION FOR SEQ ID NO:563:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 472 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:563:

```

GAATTCGGGC TTCATGGCCT ACTTTAATGA GATAGGAACT AGTATATTCA CCGTCTATGA 60
GGCCGCCTCA CAGGAAGGCT GGGTGTTCCT CATGTACAGA GCAATTGACA GCTTTCCCCG 120
TTGGCGTTCC TACTTCTATT TCATCACTCT CATTTCCTTC CTCGCCTGGC TTGTGAAGAA 180
CGTGTATTATT GCTGTTATCA TTGAAACATT TGCAGAAATC AGAGTACAGT TTCAACAAAT 240
GTGGGGATCG AGAAGCAGCA CTACCTCAAC AGCCACCACC CAGATGTTTC ATGAAGATGC 300
TGCTGGAGGT TGGCAGCTGG TAGCTGTGGA TGTCAACAAG CCCCAGGGAC GCGCCCCAGC 360
CTGCCTCCAG AAAATGATGC GGTCAATCCGT TTTCCACATG TTCATCCTGA GCATGGTGAC 420
CGTGACGTG ATCGTGGCGG CTAGCAACTA CTACAAAGAA GAAAACCTCG AG 472

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(2) INFORMATION FOR SEQ ID NO:564:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 411 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:564:

```

GCCGCGATGT TCCCCCTTCG GGCCCTGTGG TTGGTCTGGG CGCTTCTAGG AGTGGCCGGA      60
TCATGCCCCG AGCCGTGCGC CTGCGTGGAC AAGTACGCTC ACCAGTTCGC GGACTGCGCT      120
TACAAAGAGT TCGGTGAGGT GCCGGAAGGA CTGCCTGCCA ACGTGACGAC GCTTAGTCTG      180
TCCGCGAACA AGATCACTGT GCTGCGGGCG GGGGCCTTCG CCGACGTCAC ACAGGTCACG      240
TCGCTGTGGC TGGCGCACAA TGAGGTGCGC ACCGTGGAGC CAGGCGCACT GGCCGTGCTG      300
AGTCAGCTCA AGAACCTCGA TCTGAGCCAC AACTTCATAT CCAGCTTTCC GTGGAGCGAC      360
CTGCGCAACC TGAGCGCGCT GCAGCTGCTC AAAATGAACC ACCACCTCGA G              411

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(2) INFORMATION FOR SEQ ID NO:565:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 270 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:565:

```

CACTCAGAAC CCTCAGACTT TCAAAGAGCC AGGAAATCGG TATAAAATTT TTGAGATAAC      60
ATTAATTAAG CTTTTTGCGC TTTTTCCTAG GACCAGATTA AACAGAAGTT TTCCTTTTACA      120
GTATTCATTA TGGTTGGTAT CTCCAGAGTT CATCCTTTTT TTGTGGTACT GGGAAAAGTT      180
GCAACATTTA CCTTTGCAGG GACATGGATG GAGCTGGAGG CCATTATCTT TAGCAAACCTA      240
ACACAGAGCC AAAGACAAA ACCACTCGAG

```

(2) INFORMATION FOR SEQ ID NO:566:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 272 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:566:

```

GTTCTGTTG ACTAACGGCT CATCTTTTCC TTGTTTTTGT TTTTTTTTTG TTCTTTTTTT      60
CCATGTCACT AAAGGCCAAA ACTGGAACCA AGGATTTAAT AACTATTATG ATCAAGGATA      120
TGGAAATTAC AATAGTGCCT ATGGTGGTGA TCAAACTAT AGTGGCTATG GCGGATATGA      180
TTATACTGGG TATAACTATG GGAACATATG ATATGGACAG GGATATGCAG ACTACAGTGG      240
CCAACAGAGC ACTTATGGCA AGGCATCTCG AG

```

(2) INFORMATION FOR SEQ ID NO:567:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 306 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:567:

```

GCAATGGCAG GAATTCGAAA TATTGGCATA TGTTCTTTT GGATTAGATT ATATAAAATC      60
AGAAGAGGTA GAACGAGGCC CCAAGCACTC CTTTTTCTCT GCATGATACT TCTGCTTATT      120
GTCCTTCACA CTAGCTACAT GATTTATAGT CTGCTCCCC AATATGTTAT GTATGGAAGC      180

```

CAAAATTACT TAATAGAGAC TAATATAACT TCTGATAATC ATAAAGGCAA TTCAACCCCTT	240
TCTGTGCCAA AGAGATGTGA TGCAGAAGCT CCTGAAGATC AGTGTACTGT TACCCGGACG	300
CTCGAG	306

(2) INFORMATION FOR SEQ ID NO:568:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 253 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:568:

GGTGTTTGGC CACAGTTCGG GACCTATGGT AGAAAAATAC TCAGTAGCTA CCCAGATTGT	60
AATGGGTGGC GTTACTGGCT GGTGTGCAGG ATTTCTGTTC CAGAAAGTTG GAAAACTTGC	120
AGCAACTGCA GTAGGTGGTG GCTTCTTCT TCTTCAGATT GCTAGTCATA GTGGCTATGT	180
GCAGATTGAC TGAAGAGAG TTGAAAAAGA TGTAATAAAA GCAAAAAGAC AGATTAAGAA	240
ACGAGCTCTC GAG	253

(2) INFORMATION FOR SEQ ID NO:569:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 544 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:569:

CACAGTGCTG GCTCACAACA AGATGCTCAA GGTGTCAGCC GTACTGTGTG TGTGTGCAGC	60
CGCTTGGTGC AGTCAGTCTC TCGCAGCTGC CGCGGCGGTG GCTGCAGCCG GGGGGCGGTC	120
GGACGGCGGT NATTTTCTGG ATGATAAACA ATGGCTCACC ACAATCTCTC AGTATGACAA	180
GGAAGTCGGA CAGTGAACA AATTCCGAGA CGATGATTAT TTCCGCACTT GGAGTCCAGG	240
AAAACCTTC GATCAGGCTT TAGATCCAGC TAAGGATCCA TGCTTAAAGA TGAAATGTAG	300
TCGCCATAAA GTATGCATTG CTCAAGATTC TCAGACTGCA GTCTGCATTA GTCACCGGAG	360
GCTTACACAC AGGATGAAAG AAGCAGGAGT AGACCATAGG CAGTGGAGGG GTCCCATATT	420
ATCCACCTGC AAGCAGTGCC CAGTGGTCTA TCCCAGCCCT GTTGTGGTT CAGATGGTCA	480
TACCTACTCT TTTCAGTGCA AACTAGAATA TCAGGCATGT GTCTTAGGAA AACAGAATCT	540
CGAG	544

(2) INFORMATION FOR SEQ ID NO:570:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 330 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:570:

GAATTCGGCC TCATGGCCTA CATTAAAGAA AAGCTTCCCA CACATCCATT TGAAGCTGAT	60
CTCCTTGAGA TGGCAGAAAT GATTGCAGAA GATGAAGAGA AGAAGACTCT ATCTCAGGGA	120

GAGTCCCAAA CTTCTGAACA CGAACTCTTT CTAGACACCA AGATATTTGA AAAAGACCAA	180
GGAAGTACAT ACAGTGGTGA TCTTGAATCA GAGGCAGTAT CTA CTCCACA TAGCTGGGAG	240
GAAGAGCTGA ATCACTATGC CTTAAAGTCA AATGCTGTGC AAGAGGCTGA TTCAGAATTG	300
AAGCAGTTCT CAAAAGGGGA AACCTCGAG	330

(2) INFORMATION FOR SEQ ID NO:571:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 312 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:571:

GAATTCGGCC TTCATGGCCT AAGGGAAAAC ATTTTGCATG TGTAAGCTT CATGAAGTTC	60
TCTTTAAAAA ATACCAAAGC TTGTTTATTT CTGATAATTA ACCTAAGCCC TTATGAAAAT	120
AAACAAAATG AAGGGATTAT GACAGGTATT ACCAAAAACA CCAAAGGAA CAAAGGGGCC	180
TGCGTTAAAA CCTAATTGCT AATGCTTCAC AACTAGGAGA GCATGCCGTC TTGATGTTTA	240
AAAAACCCAG GGTCTCCACC CTTCCTTTGA TTTGTGCAAT TCTGTCTTCC ACAGTCCGG	300
AGCTTACTCG AG	312

(2) INFORMATION FOR SEQ ID NO:572:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 391 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:572:

GAAATGTTC ATGGCCGAG CAGGAGTAGA GGTCTGAGC CTCCTATTTT TCTGCATCTA	60
CTGGGGTCAA TATGCCACCG ATGGCATTGG CAACGAGAGT GTGAAGATCT TGGCCAAGCT	120
GCTCTTCTCC TCCAGCTTCC TCATCTTCCT GCTGATGCTT ATCCTCCTGG GGAAGGGATT	180
CACGGTGACA CGGGGCCGCA TCAGCCACGC GGGCTCCGTG AAGTTGTCTG TCTACATGAC	240
CCTGTACAG CTACCCCATG TGGTCTGCT CATCTACGAG GCGGAATTCT TTGACCAGG	300
CCAGGTACTG TACACGTATG AGTCGCCGGC CGGCTACGGG CTCATTGGAC TGCAGGTGGC	360
GGCCTACGTG TGGTCTGCT ATGCTCTCGA G	391

(2) INFORMATION FOR SEQ ID NO:573:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 377 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:573:

GAATTCGGCT TCATGGCCTA AAAAAAATC CAGAAAAAA CAACAGCGCG GTGGTGGGGT	60
TTTGTTAATT TCGCCTTTTT TTTTCTTGC ACGCGCCACG AAATTCAGGC TCGGTTTAGC	120
TCCTGAGAAA TATCCAAAGT AATTGCAGAT TGCGGAGACG CACAGCATT GTTCAAAAAA	180

GACCCGAGGC	ATTGGGGCAG	GGTTAGGTGG	AGGGCACCGG	AGGCTCTACA	CAAGAAAAGC	240
AGGAACCTGC	AAACCCACGT	AGATTTCAC	TACAACCTTC	CCTTTTCTTC	TGGCTAGCCA	300
TCCAGCGCTC	TCCATGGCAC	TGCATGGCAC	AAGTTGCTTC	TGATAGTCTT	TTAAGTTTGC	360
TAAGGGAAC	TCTCGAG					377

(2) INFORMATION FOR SEQ ID NO:574:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 325 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:574:

GAATTCGGCC	TTCATGGCCT	ACAGCCTCAA	GTCCTCCCA	AGCCCCCTCC	TTGTCTGTGC	60
ATCCGGGGGC	AGCTCTGGAG	GGGGTTTGCT	GGGGAAGTGG	CGCCATCGCC	GGGACTCCAG	120
AACCGCAGAA	GCCTCCCCAG	CTCACCCCTG	GAGGACGGCC	GGCTCTCTAT	AGCACCAGGG	180
CTCACGTGGG	AACCCCCCTC	CCACCCTCGC	GAGTCTGTTT	CCAAGGAGGA	GAAGGAGCAG	240
AACTATGACT	TAAGTGAAGT	CTCAGAGAGC	ATGAAAGCTT	TCATATCCAA	AGTCTCAACC	300
CACAAGGGAG	CAGAGCTGCC	TCGAG				325

(2) INFORMATION FOR SEQ ID NO:575:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 438 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:575:

GAATTCGGCC	TTCATGGCCT	ACTCAGCCTC	CCTAATAGCT	GGGATTACAA	GCGTGAGCCA	60
CCACACCCCG	CTGGGAAATA	TCTTAAAAGA	ATCAAAATAA	GAAAGTTACT	CTACTTAAAT	120
CGTGTGCTTT	TTCTGTGTGT	GATTTATGGT	AATCTTACCA	TGGGGTATCT	GATTACTTTA	180
GAAAGATCCA	TTTAGCTTAT	TTTTTCTTTC	TTTGGGTTAT	TTTTTCTTTC	CTTCCATTTC	240
CACAGCCTCC	CCCCAAATAA	AAAATAAAGA	TATAAAGTCT	ATCTTCTCCC	TCTTGTCACT	300
TTAAGTAAAA	AGAACTTTTG	CTTCCATTTT	AATAATAGAA	TTTGTGTGTA	TATAATATAG	360
GCAGTGATTT	GGCCTCAAGC	TGAGTTTAGA	TTTGAAAAGA	TGAGAATATT	AAAGCTTGTC	420
AGCCAGCCCA	CTCTCGAG					438

(2) INFORMATION FOR SEQ ID NO:576:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 510 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:576:

GAATTCGGCC	TTCATGGCCT	ACTGTNTTCC	ATAAAGGCTG	TACTAATTTT	CATTCTCACC	60
AACAGTTCAC	TAGGGTCCCC	TTTTCTCCAC	ATTGTTGCCA	ACATTCTTTA	TCTGTGTTT	120

NTTAATAACA	GCTATCCTAA	CAGGTATGAG	GTGATCTCTC	TCATTGCGGT	TTTGATTGTC	180
ATTTCCCTAA	CGGTTGGTGA	TACTGAGCAT	TTTTGCATAC	ACCGGGTCAT	TTGTTCTTTG	240
TTGTTGACTT	GAGTCCCTTA	TATAGTTTGG	ATACTGCTGT	GGCCTGAATG	TTTGTGTCCC	300
CCAAAAATTC	GTATATTGAA	CTCTCATCCC	TAAGGTCAAC	AGTTTAGGGA	AGCGATTAGG	360
TCCTGAGGAC	TCTGCCCTCT	TGCATAGAAT	TAGTGCTCTT	ATAAAAGATG	CCCGAGGGAG	420
CTCTTTTGCC	CCTCCTGCCA	TGTGAGGACA	CAGCTAGAAG	CTACCATCTG	TGAACCAGGA	480
AGCCCCCTC	ACCAGACACT	GTATCTCGAG				510

(2) INFORMATION FOR SEQ ID NO:577:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 276 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:577:

GAATTCGGCC	TTCATGGCCT	AAAAAATAAA	AATAAAATAT	ACAACCAAAG	GCAGTATTCA	60
CAGAGGTATT	TCTTGGGAAT	AAAAGAAGGA	ATATAGTCAT	TCCTTGGTAT	TCTCTTTGGT	120
GTCCAGAGTT	ACTTAAAAAT	TCTTGGTGT	TATTGCCTTT	TAGTCACAGG	GATACACCTT	180
TTATTCATT	ATTTATTTAT	TTACCAGTCT	CATTTAGCAG	TAGGAATGCA	TCTTAGCATT	240
TTTATACTGC	TGCTCAACAC	AGTGCTTTCA	CTCGAG			276

(2) INFORMATION FOR SEQ ID NO:578:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 262 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:578:

GAATTCGGCC	TTCATGGCCT	AAATCCTTCC	AGATGTCCTG	TGAAAATGTT	TGAATGCTAC	60
TTGTCTAAAA	GTCCACAGAA	TCTTAATCAG	AGGATGGATG	TTTTTTATTT	GCAACCAGAA	120
TGCTCTAGTT	CTACAGATAG	CCTGTCTGG	TATACGTCTA	CTTCACTGGA	CCGAAACACC	180
TTGGAAAATA	TGCTTGACG	GGTTCTTCTA	GTAAAGATA	TTTATGATAA	AGACAATTAT	240
GAACTGGAGG	AAGACACTCG	AG				262

(2) INFORMATION FOR SEQ ID NO:579:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 439 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:579:

GAATTCGGCC	TTCATGGCCT	AATTTAGGAC	CATTTAAGAG	AGTTTGACTA	AGAAAGAGCT	60
GTTTGAAACC	TCCTGGCTTA	TGTATTTTAA	GGGGTGTGGT	GATCGAGGCT	TTCTCCTCTG	120
AGTAGAGTTT	GTGCATTGTC	AGTATAAGAT	TATCATTATC	AAACATTCTT	ACTAGGCCTT	180

TCTCCTCAGC	CCCTAAAAAA	ATATGTATAG	TAATGAAGTA	GGAAGATCAT	GTTTATATTT	240
GACTTCACAA	ATTCTCAGG	CTAAGTTGCT	TTCTACTGGG	GTGTGGCTGG	AGACAAAAAT	300
TACAGGTAAG	ACTTGACTTA	ATTTTGTATA	GGGAGGTTCT	TAAGAGGCTT	TTTCGGAATC	360
ACTCACCTCG	CCCACTTCCA	TGCAGGGATG	TGGTGAGAGC	CCTTCAGTCT	ACTTAGGAAA	420
ACCTGGCACA	TGACTCGAG					439

(2) INFORMATION FOR SEQ ID NO:580:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 346 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:580:

GAATTCGGCC	TTCATGGCCT	AGATATTCTC	AGGGTCATCA	AGACTCCTGA	GATAGCAAAC	60
TTGGCCTTGC	TTGGCTTTGG	AGATATCTTT	GCCCTGCTGT	TTGACAACCG	CTACCTGTAC	120
ATCATGGACT	TGCGGACAGA	GAGCCTGATT	AGTCGCTGGC	CTCTGCCAGA	GTACAGGAAA	180
TCAAAGAGAG	GCTCAAGCTT	CCTGGCAGGC	GAAGCATCCT	GGCTGAATGG	ACTGGATGGG	240
CACAATGACA	CGGGCTTGGT	CTTGCCACC	AGCATGCCTG	ACCACAGTAT	TCACCTGGTG	300
TTGTGGAAGG	AGCACGGCTG	ACACCATGAG	CCACCAGCCG	CTCGAG		346

(2) INFORMATION FOR SEQ ID NO:581:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 740 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:581:

GAATTCGGCC	TTCATGGCCT	AGACCTGCCT	CGAGATTGCC	ATCTTGTTT	TGGTGGGTTT	60
CGGCCGACTT	CTTTGCCACT	TGCTATTTTA	TTTTCTAGGT	CTTTGTGCCC	CGTATTGTGT	120
GCTGAACCTC	NGTCTCATCC	TGTGACTAAG	ATTGCCTAAC	CTCCTGGGAA	TGCAGCCCAG	180
TAGATCTCAG	CCTTACTTTA	CCTAACCCTT	TTTCAAGATG	GAGTCACTCT	GGTTCAAACA	240
CCTCTGACAT	TCGCAGTGGA	ATCCATTAAA	AGATGTAAAG	GAGATATGAT	TATATTTCTA	300
AATTGTCACT	CCAGCATCCC	CTACGCCAGA	CATTATGCCA	GTCTCTATCC	ATACAGTATC	360
TCATTTAATC	CTCCCGTCAT	TAATCTCATT	TTACCAATGA	GTAAACTTGA	AGCAAATGAG	420
TGACTTTCTC	AAGGCTACCT	ACTTACGCCT	TACCAGGGCC	AGGATTCAAA	CCTAGACTTG	480
TTCAGCGACA	GAACACACAC	TTAACCATCA	CCCCTTAGG	CCATGAAGGC	CGGCCTTCAT	540
GGCCTAAACT	GCTGTTATTT	TGGATTATAT	GGAGTTATGA	AAATCTAAAT	GTTTTACAAA	600
GTTAAAAAGT	ATTCTTTTTT	TGCTCACTTA	TAACTCAAAA	ATCACTAAAG	TCATTCTGCT	660
AAACATGCCA	CGAAGCCAAG	CTTCTTGCCA	TATGTCTGCA	TAATTTTATT	AAATCACTGC	720
TATTGACGTG	CAACCTCGAG					740

(2) INFORMATION FOR SEQ ID NO:582:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 491 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:582:

GAATTCGGCT	TTCATGGCCT	ACAAAGGGGT	AGCAAGGCAT	GTCTTACATG	GTGGCAGCAG	60
AGAGAGAGAG	CAGGGAAAAC	TGTCATTTAT	AAAACCATCA	GATCAGTTGG	GTTGTGCAAA	120
TGGTGGAGAA	GAAAACCTCA	GGAAGAGTGC	ATAGACTGAG	CAGAGAAGAG	GACCAGCTAC	180
CTCCGTAGAG	GCAGGGAGAG	CAGCCAAGCT	GGAGCCTGAG	CAGCATTGCT	GGACATGGAG	240
AAGGTCTGGA	ATCTTGTCAG	GGAAGCAAGC	AAAGGGTTTC	TTTCTATTCA	ATGAAGTCCA	300
CTCCCAGGAC	CCTGGGCAGC	AACGGGTGCT	GGACTGGGCC	ACCTGGCAGC	GTCACATCAA	360
CTGGCAGCTA	GAAGTCCTGG	AGAATGACAA	CTTCCAGGAC	GACCCCCATG	TGGGACTCCC	420
TCAGCTCAGC	AAGAGACTGC	CACAGTTCGA	TGATGATGCA	GACACCAGAC	AGTAAAGAA	480
GAAAACCTCGA	G					491

(2) INFORMATION FOR SEQ ID NO:583:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 566 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:583:

GAATTCGGCC	AAAGAGGCCT	AAACAGTCCA	GAGAGGCATA	AATCAGACCC	AGTTCCTAGC	60
TGGCTTGTC	TTATCAAGTA	AATGGAAAAG	GGGCCAGGCC	AAAGCAGGGC	AAGATGACCT	120
TGGAATTGGG	AGAGACTTGG	ACTCATGCCA	CAATCCTAGG	GTGCCCCACTG	GACCATTTGCT	180
TTTCTGAGTT	TTGTAGTCAT	TCGGTGTCTG	AAGTAAGGTA	GATTGAAGTG	AGGCCTTCGG	240
TTTCCATCTG	GACCCTTTCT	CTCCTGTTTT	CTTTTTTTCC	GCCTTGTCCT	AGGGATGTTC	300
AATAGCCCCAG	AAATGCAAGC	CCTCCTCCAG	CAGATCTCTG	AGAACCCCCA	GCTGATGCAG	360
AATGTGATCT	CAGCACCTTA	CATGCGCAGC	ATGATGCAGA	CGCTTGCCCA	GAACCCCGAC	420
TTTGCTGCTC	AGATGATGGT	GAATGTGCCG	CTCTTCGCGG	GGAACCCCCA	ACTGCAGGAG	480
CAGATCCGCC	TGCAGCTCCC	AGTCTTCCTG	CAGCAGATGC	AGAACCCAGA	GTCACTCTCC	540
ATCCTTACCA	ATCCCCATAC	CTCGAG				566

(2) INFORMATION FOR SEQ ID NO:584:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 482 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:584:

GAATTCGGCC	TTCATGGCCT	AGTTGAAAAT	GATCATTACA	CAATATATTC	CTAAACATAA	60
ACTGAGTAAA	CTTGAAACAG	CTCACTGTGT	GGAGAGGACC	ATTCCTCGTTT	TGCTCACCAG	120
AACTGGAGAT	TCTTCTGCCC	GCCTCCGCGT	CACAGCTGCA	AATTTTATTC	AGGAAATGGC	180
CTTGTTTAAA	GAAGTTAAGT	CTCTCCAAAT	TATTCCATCC	TACCTGGTGC	AGCCATTGAA	240
AGCAAACTCT	TCAGTTCACC	TGGCAATGAG	TCAGATGGGC	CTCCTGGCCC	GGCTGCTGAA	300
AGACCTGGGC	ACTGGCAGCT	CGGGCTTCAC	CATTGACAAC	GTGATGAAGT	TTTCAGTGAG	360
TGCCCTGGAG	CATAGAGTGT	ATGAGGTCCG	CGAGACGGCG	GTTCGAATTA	TTTGGACAT	420
GTACAGACAG	CACCAGGCTT	CCATCCTGGA	GTACCTTCCT	CCAGACGACA	GCTAATCTCG	480
AG						482

(2) INFORMATION FOR SEQ ID NO:585:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 265 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:585:

GAATTCGGCC AAAGAGGCCT AATAAAGGTG TGGAACTTC ATTCATTCAT ATCTTCAACA	60
CAAATTGTAG GTAGCCTGTT TTTTAAACA TTTATTCAAC AAATATTTAG TCCAAGCCAC	120
TATTACTTAC TACCTTCTCT ACTATTGTAT GGACTTTTAA CTATCTCTGA CACTATTCAC	180
TATTCTTCCA CATTCTCTAT TATTATACC TATGGTAAAA TTTGCCAGTT TGACCATACA	240
ACTAATACTC ACAGGGACAC TCGAG	265

(2) INFORMATION FOR SEQ ID NO:586:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 120 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:586:

GAATTCGGCC AAAGAGGCCT ACTCGAGTTT GGTGCTTTAT TTAGCAAGTG AGTAAAAATA	60
TTGGAATATT TAAGTATTG CATAAAAAAT CAAATGGTAG TGTTTTGTA TCTCTACTGT	120

(2) INFORMATION FOR SEQ ID NO:587:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 503 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:587:

GAATTCGGCC AAAGAGGCCT ACTCGAGTCA GGTCTAGAAT TCAATCGACG GTTTAGGAAA	60
AAGACAATTT AAGAGAAGAA CTAAAGAAAA GAACAGAAAC TGAGAAGCAG CATATGAACA	120
CAATTAAACA GTTAGAATCA AGAATAGAAG AACTTAATAA AGAAGTTAAA GCTTCCAGAG	180
ATCAACTAAT AGCTCAAGAC GTTACAGCTA AAAATGCAGT TCAGCAGTTA CACAAAGAGA	240
TGGCCCAACG GATGGAACAG GCCAACAAGA AATGTGAAGA GGCACGCCAA GAAAAAGAAG	300
CAATGGTAAT GAAATATGTA AGAGGTGAGA AGGAATCTTT AGATCTTCGA AAGGAAAAAG	360
AGACACTTGA GAAAAAATT AGAGATGCAA ATAAGGAACT TGAGAAAAAC ACTAACAAAA	420
TTAAGCAGCT TTCTCAGGAG AAAGGACGGT TGCACCAGCT GTATGAACT AAGGAAGGCG	480
AAACGACTAG ACTCACTCTC GAG	503

(2) INFORMATION FOR SEQ ID NO:588:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 567 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double

(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:588:

GCCACTATGG	TACCAAAACC	TCAGTCTTCA	CATAGTCAAA	CTTGGACACA	AACAGCACCT	60
CCCACAAACA	TTCTTATCCT	CATCCCAGCA	TTGGTTACTG	ACCACACACT	CTAGCAGGTC	120
ACTCAAGCGC	TAATGCTGGG	AAGGACCTCT	GAATACTTCT	CTTTGTCTTG	TGCCACACAG	180
CCAGGGTCAC	CAAAGCCTGT	TAATGCTACC	TCCAAAAAAG	GCAAATCTGA	CCCCTCTTCC	240
TCAAAACCCA	GCCACATAGT	AAGTCAAGG	ATTCACTCAC	AGGTCTGCCT	TAGTGCACCTA	300
GCCCTATAAC	AGTAACTAT	TCACTTCCCC	TCCAGTCCCT	TGCCCCCTTT	CAAGCAATTT	360
CCTGTACTGC	CAAGGGAATT	ACTTTTCTAA	AATTAGCTAA	GAAACTTTTG	ATGGTATCTT	420
ACTGTCCCAA	AAATAAATTT	TAATTCCTTC	TTTAGCATGG	TATAAAAAGG	ACACAACAGA	480
GTTTGGTCTA	GTGTCCTTTT	AAAGACACTA	GATTTCTCAT	CACCATACCG	CATGTACCCT	540
ATACGACTTA	TCAATTCCCT	ACTCGAG				567

(2) INFORMATION FOR SEQ ID NO:589:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 138 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:589:

GAATTCGGCC	AAAGAGGCCT	AGGCATGGTG	AGTTTTGATC	TTCTTCCCCT	TCTTTTCTTC	60
CCCTTCTTCT	TTCTTCTTT	GATCTTCTTC	CCCTTCTTTT	CTTCCCCTTC	CCCTTCTTTT	120
CAATTTCTCC	CACGTCAA					138

(2) INFORMATION FOR SEQ ID NO:590:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 420 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:590:

GAATTCGGCC	AAAGAGGCCT	AGAGAGAATG	GAAAAGATAA	GGAACAGAAA	CAAACAAATA	60
CCGATAAAGA	AAAAAATAAA	AGAGAAAGGG	AGCTTCTCTG	ACACAGGCTT	GGGTGATGGA	120
AAAATGAAAT	CTGATTCTTT	TGCTCCCAA	ACTGATTCTG	AGAAGCCTTT	TCGGGGCAGT	180
CAGTCTCCCA	AAAGGTATAA	GCTCCGAGAT	GACTTTGAGA	AGAAGATGGC	TGACTTCCAC	240
AAGGAGGAGA	TGGATGATCA	AGATAAGGAC	AAAGCTAAGG	GAAGAAAGGA	ATCTGAGTTT	300
GATGATGAAC	CCAAATTAT	GTCTAAAGTC	ATAGGTGCAA	ACAAAAACCA	GGAGGAGGAG	360
AAGTCAGGCA	AATGGGAGGG	CCTGGTATAT	GCACCTCCAG	GAAAGGAAAA	ACCGAGGCAG	420

(2) INFORMATION FOR SEQ ID NO:591:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 611 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double

(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:591:

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GAATTCGGCC AAAGAGGCCT ACATTGCTTT TCAAATAACT TAAAATAACA CGTTATGTGC      60
CATGTGGCTA CTTTAGTAAT ATTGCCAAGA AGAGCACAGT TTTTACACTA GTGGCATCTC      120
AGTGAAATTA ACCAAAGATG AAGCTTTGGC TTTGCTGGTG AGATCAGAGC CCTCCTGAGC      180
AGGCAGCGCC ACTCCAGGGT TCAGACAGGG CTGCACAGGC GGCAGAGATA CAGGGTCTGA      240
GGGCTGAGAC GCCATGGGGC CGCTGCTGCT TATGTGGTTG GATTGTTTAC AAGCCTCATT      300
ATTAAACTG AAGGCATTTT TTTTCTCTG CTGCCTTTCC CAAAGTGGTT AGGTTTGGAA      360
AAGAGATGAT GATGGTAATA TTTATTTGTG CTTTCTAAGC CATTTCCTCA AATGGGACTA      420
GCATGCTTGT TTTCAGTATA CCGTGGCCTG CCTCATGATG GTTTGGAGAT ACTGTCTGTG      480
GATGTGAGGT GGGGACTTCA TTCATTGTCC TATTTCTATC TNCACTTTGT GCCTGGAGAG      540
CTTTCAGGGG AGGTGGAGGA GGAGGGTCTG CCAAGCTACT GCAACATCTG TCACCCACTA      600
NACCCAGACC T

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(2) INFORMATION FOR SEQ ID NO:592:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 443 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:592:

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GAATTCGGCC AAAGAGGCCT AATTGAATTC TAGACCTGCC TGAAACCTGT CCCTCCTAGG      60
AAATTGAATA GCTTGAGTTA CGAAGGAAGT GCATGGGACA GACTGAGTTT TGTTCCCTCTC      120
TTCCCTGGAA GCTGGATGTC CTTTACAGCT TTGCCAGTA TGTCATGTGG CCCCTGAAGT      180
ACATAATCCA GAGTGGACTG CTTTTCAGGG TCCCTCAGCT GTGAAAGTGG AGCATTTCATA      240
TCAAGACTAC ATCTTCCCTG TTCAGCTTTC TTCAGCCTTG GAGGAACCAAC ACACAATGGA      300
TCCAAGACTT CTGTCCCTTG CTAATTATCT ATAAGAAGTA AACCATTTC ACATAACTTG      360
TGAATATGTT TTCTTTCCTT GGATTTTGGC AAATAGGTAC CCAGTGCATG GTGGACCTAC      420
ACAGTTAGGC CTCTTTGGCC GAA

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(2) INFORMATION FOR SEQ ID NO:593:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 441 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:593:

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GAATTCGGCC AAAGAGGCCT AAAAGCATTC AGTATTGGTA AAATGAGTAC AGCTAANCGA      60
ACTTTAAGTN AAAAGGAGCA GGAAGAATTA AAGAAAAAGG AGGATGAAAA GGCAGCTGCT      120
GAGATTTATG AGGAGTTTCT TGCTGCTTTT GAAGGAAGTG ATGGTAATAA AGTGAAAAACA      180
TTGTGCGAG GGGGTGTTGT TAATGCAGCT AAAGAAGAAC ATGAAACAGA TGAAAAAAGA      240
GGTAAAATCT ATAAGCCATC TTCAAGATTT GCAGATCAAA AAAATCCTCC AAATCAGTCT      300
TCCAATGAAA GACCACCATC TCCTCTGTG ATAGAAACCA AAAACCTCC ACTTAAAAAA      360
GGAGAGAAAG AAAAGAAAAA AAGCAATTG GAACCTCTCA AAGAAGAATT AAAGCAAATT      420
CAAGAGGAAC GTCGACTCGA G

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(2) INFORMATION FOR SEQ ID NO:594:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 562 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:594:

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GAATTCGGCC AAAGAGGCCT AAGAAAACCT AGCTAATAAA GAAAAAGCTG TTGCTCAAAT      60
GAAGATAATG ATCTCAGAGT GTGAATCATC TGTGAACCAG CTGAAAGAAA CATTGGTTAA      120
TCGAGATCGT GAGATAAACA GCCTCCGGCG CCAGCTTGAT GCAGCTCACA AAGAAGCTCGA      180
TGAAGTAGGA AGATCTAGAG AAATCGCTTT TAAGGAAAAC AGAAGACTGC AAGATGACCT      240
GGCTACAATG GCAAGAGAAA ATCAAGAAAT CTCATTGGAA TTGGAAGCAG CAGTGCAAGA      300
AAAAGAAGAA ATGAAGAGCA GAGTTCATAA ATACATAACA GAGGTGTCAC GATGGGAGAG      360
CTTAATGGCT GCCAAGGAAA AAGAAAATCA AGATTGTGTA GATAGATTTC AGATGCTTCA      420
TAACCGTGCT GAAGACTGGG AGGTCAAAGC CCATCAAGCT GAGGGAGAAA GCAGCTCAGT      480
TCGACTGGAA CTTCTTTCTA TTGACACTGA GAGGAGACAT CTTCCGGGAA GAGTGGAGCT      540
ATTAGAAAAA GAAAATCTCG AG                                     562

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(2) INFORMATION FOR SEQ ID NO:595:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 426 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:595:

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GGAAGAGCAG AATTTGGTGG CTTATCCTCA TGATGGAAAA ATCTTTTTCT GCACCTCACA      60
AGATATCCCT CCTGAAAATG AACTGCTTTT TTATTATAGC CGAGATTATG CTCAACAGAT      120
TGGTGTTCTT GAACACCCAG ATGTGCATCT CTGTAACGTG GGCAAGGAGT GCAATTCTTA      180
CACAGAGTTC AAAGCCCATC TGACCAGCCA CATCCATAAC CATCTTCCTA CCCAGGGACA      240
TAGCGGCAGC CATGGGCCAA GTCACAGCAA AGAAAGGAAG TGGAAGTGCT CAATGTGCCC      300
CCAAGCTTTT ATCTCTCCTT CCAAACCTCA TGTCCACTTT ATGGGTCACA TGGGTATGAA      360
GCCCCACAAG TGTGATTCTT GTAGCAAGGC TTTTAGTGAT CCCAGCAACC TGCGAACCCA      420
CTCGAG                                     426

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(2) INFORMATION FOR SEQ ID NO:596:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 328 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:596:

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GAAAAATCAG TCGACTGAAT GACACCATCA AATCTTTGAA ACAACAGAAG AAACAAGTGG      60
AACATCAGCT GGAAGAAGAA AAGAAAGCAA ACAATGAGAA ACAGAAAGCT GAAAGGGAGC      120
TAGAGGGTCA AATCCAGAGA TTGAACACAG AGAAAAAGAA ACTAAATACG GACCTGTATC      180

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ACATGAAACA TTCTCTCAGA TACTTTGAAG AAGAGTCCAA GGATCTGGCC GGCCGCCTGC	240
AACGTTTCATC GCAGCGTATA GGAGAGTTAG AGTGGTCTCT CTGTGCTGTC GCCGCCACAC	300
AGAAGAAGAA GCCGGATGGG TTCTCGAG	328

(2) INFORMATION FOR SEQ ID NO:597:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 529 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:597:

GAGAAAGTGC	AGAGGGGCCA	GTGTTGTTGT	TACCTGAAAG	GTAAGTGCAG	CCCACAAAAA	60
TGCAGTGAAG	AAGAAGATAT	ATGCATATGT	TTAAGTTAAT	ACAATTGAGA	TACATTTAGC	120
AGACAGAATC	AATAGAGTTG	ATGAGTGACT	GACTGGATGT	GTGGGGAGTT	TATATCACTC	180
CCAGGTTTTT	GACTTGGGCC	ACCGGGCACT	CAAGAAGGAA	AAAGAGGATC	CAGGGAGAGG	240
AACTTTTCTG	AGGACTGGGG	TAGGGCTGAA	CAGCTGCATT	CGAGACTGGT	GGAGGGTGGG	300
CTGGGCATGG	GATGCACAAA	TGGAAATTC	ACTGGGTCTG	CAGCTCACAC	ATAGGCATGA	360
CCAGCATAGA	GATAGAGAGG	CCCCAGTGCT	GCTGAGTAAC	TGTGATTCCC	CAGGTGATGG	420
CATCAGCTGA	GAAGGGAAGG	AAGCCCATGT	GAGGACACTG	AAGAAGGAGT	GAGCAGACAA	480
TAAGAAGCCC	ACAGAAGACA	GAGAAGGAAC	AACTAGAAGG	AGGCTCGAG		529

(2) INFORMATION FOR SEQ ID NO:598:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 454 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:598:

GAAAAAGATG	AAATCTGATG	GATTAGGAGC	ATCTGGACAT	TCGTCAAGTA	CCAATAGAAA	60
TAGTATAAAT	AAAACCTCTGA	AGCAAGATGA	TGTAAGGAA	AAAGATGGTA	CAAAAATAGC	120
ATCTAAGATT	ACAAAAGAAC	TTAAACTGG	GGGAAAAAAT	GTTTCTGGAA	AGCCCAAAAC	180
TGTAACAAA	TCCAAAACAG	AAAATGGTGA	TAAGGCACGG	TTGGAAAACA	TGTCACCTAG	240
ACAAGTTGTA	GAAAGATCAG	CAACAGCAGC	AGCAGCAGCA	ACTGGACAGA	AGAATTTACT	300
AAATGGAAAA	GGAGTGAGAA	ATCAGGAAGG	GCAAATTTCA	GGTGCCAGAC	CCAAGGTACT	360
CACAGGAAAC	TTAAATGTGC	AAGCCAAAGC	AAAGCCTTTG	AAGAAAGCTA	CAGGGAAGGA	420
TTCAACATGC	CTCAGCATCG	CAGAACCCCT	CGAG			454

(2) INFORMATION FOR SEQ ID NO:599:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 411 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:599:

GAATTCGGCC	TTCATGGCCT	AGGTCCTCAA	GCATTGCTTC	AATATCAATA	TCGTCTGCCA	60
TTTTCCTCTAA	ACGCCTGTTC	CGGCCTTCGG	GCGCCTGTGG	TGCTCGTGTT	CGGGAAGAGA	120
TTGCTGCTGC	TGCTGCTGCT	GCTGCCGCCG	CCGCCGCTTC	TGTTGCTACT	GTTAAGCCCC	180
TAGGCCCAGG	CCGCGGAACC	GCCCAGCCCG	AATATCGGGT	TCCAAGGACG	GCTAGGCCCG	240
AGAGAATCTA	AAAAAAACAA	TGGAATTAGA	GAAAGCCACG	CGGGAGAGCA	GGACGGCGGC	300
TTCGGCAGCT	CAGGATCCAC	CCCNCGACA	GCGTCGACAA	GTTCCCTGAA	ATGGCGGCCG	360
CTGCTTCCT	GTACTCANAN	TCCACCCCC	GAATTCTAGA	CCTGCCTCGA	G	411

(2) INFORMATION FOR SEQ ID NO:600:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 306 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:600:

GAATTCGGCC	TTCATGGCCT	AATTAAGCCT	GCCTACTTCT	ACAATGCATT	CTGTTACCTA	60
TTTGAACAGT	ATGTTTGTA	CTATGGCAAT	GAAGTCAGTA	GATAGGAAAC	CAGTTATTCC	120
TTCTACCTTT	AAAAATTTTG	AGAACTTGCC	AACCAGGGAC	TAAAGCTATT	ATCTTGAACA	180
GAGTCCCTAA	AGCTAGTCTA	GTTTTTGCCA	CATCTGCAAT	GATTATTGTT	TAATTTCAAA	240
AGAATCCTCA	GGCTCTACAA	TCTAGGGGTG	GTAATGTGT	TTCCACTATA	CTTGGGACCG	300
CTCGAG						306

(2) INFORMATION FOR SEQ ID NO:601:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 443 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:601:

GAATTCGGCC	TTCATGGCCT	AGGAATCTCC	TCTTAAACCA	GGTGAAGTGG	GAAAGCAGGG	60
ACCATACCAC	CCTGAGTGAC	ATCTACCTGA	ATAATATCAT	TCCTCGATTT	GTACAAGTCA	120
GCGAGGACTC	AGGAAGACTC	TTTAAAAAGA	GTAAAGAAGT	CGGCCAGCAG	CTCCAAGATG	180
ATTGATGAA	GGTCCTGAAC	GAGCTCTACT	CGGTCATGAA	GACATATCAC	ATGTACAATG	240
CCGACAGCAT	CAGTGCTCAG	AGCAAATAA	AGGAGGCGGA	GAAGCAGGAG	GAGAAGCAAA	300
TTGGTAAATC	GGTAAAGCAG	GAGGACCGGC	AGACCCCATG	CTCCCCTGAC	TCCACGGCCA	360
ACGTTCCGAT	TGAGGAGAAA	CATGTCCGGA	GGAGCTCAGT	GAAGAAGATT	GAGAAGATGA	420
AGGAGAAGCA	CCAAGCCCTC	GAG				443

(2) INFORMATION FOR SEQ ID NO:602:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 585 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:602:

GAATTCGGCT	TCATGGCCTA	CAACATGTCA	GTTTTTTTTT	TCATTTTCCT	CAATATTTTT	60
CTTCTNGCTT	TCTCTTCTCC	TGGTTCCCAG	CCTCTACTCA	ATAGTCCCCC	CAGCTTTGTG	120
TGCTGGTCTC	GGGGCTTCAT	GGAGATGAAT	GGGCGGGGGG	AGTTGGTGGA	GTCACCTAAG	180
AGATTCTGTG	CTTCCACGAG	GCTTCCCCCC	ACTCCTCTGC	TGCTATTCCC	TGAGGAAGAG	240
GCCACCAATG	GCCGGGAGGG	GCTCCTGCGC	TTCAGTTCCT	GGCCATTTC	TATCCAAGAT	300
GTGGTACAAC	CTCTTACCCT	GCAAGTTCAG	AGACCCCTGG	TCTCTGTGAC	GGTGTCAAGT	360
GCCTCCTGGG	TCTCAGAACT	GCTGTGGTCA	CTTTTCGTCC	CTTTCACGGT	GTATCAAGTA	420
AGGTGGCTTC	GTCCTGTTCA	TCGCCAACTA	GGGGAAGCGA	ATGAGGAGT	TGCACTCCGT	480
GTACAACAGC	TGGTGGCCAA	GGAATTGGGC	CAGACAGGGA	CACGGCTCAC	TCCAGCTGAC	540
AAAGCAGAGC	ACATGAAGCG	ACAAAGACAC	CCCACACATC	TCGAG		585

(2) INFORMATION FOR SEQ ID NO:603:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 368 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:603:

GAATTCGGCC	TTCATGGCCT	AGTCTGGTAG	TAAGGTGGAG	TGGGTTTGGG	GCTAGGTTTA	60
GCTCGGGGGA	GGTGGTGTTG	GGGGCCGCAG	GCTGCGCGGT	GCCTGGGTAC	ATCTCCAGGC	120
CCACGCCCCG	GGCTTGGGAA	GTCACATCCA	TGTCTCTGCG	CCGTGCAGCT	TTCAAGATTT	180
GCCGAAAGGC	TCCCAGAGCT	CTGTTTTAAA	TGGTGAATCC	ATCTTTAGAA	AGAAGCGTGA	240
TTCTCCTTGA	AGTGAGCCTG	GCATTGTGCA	GACAGGAAAC	TCCCCAGGAG	GAGCACCTGT	300
GGTGGTTTGG	GTTGGGTTTG	TTAACTGCAG	AGAGTGGGAA	GAACAGATGC	TCCTCACACC	360
GTCTCGAG						368

(2) INFORMATION FOR SEQ ID NO:604:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 604 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:604:

GAATTCGGCC	TTCATGGCCT	AGGAAAGACC	ATCAGCCTGG	GAGTCAGTGA	ACCTGACTCT	60
GATCCCAGCT	CTGCCTCCAN	TCAGCTGTGT	GATGACAGGT	AGGTCACCTT	CCCTCTCTGA	120
GCCACAGTTT	ATCTGTCTGT	AAACAGGGGT	ATTGGACTGG	ATTCTCTGTT	ATCTCTCATG	180
TCTCTGTGAA	AGGTCTGTGT	TTTCAAATAC	TCCTTAGGGA	CATGACCTCA	CATAGAAAGA	240
GGGGGTGCCA	CGAACTGGAT	TCCCAGCACT	CCCCCTTCCC	AGCTCTGCTC	AAGCTGAGGG	300
ACCTTGGAAC	ATGGTACTTG	GACCTAAGTA	CTCTCTCTGG	GCTTCAGTGT	CCCCAGCTAT	360
AAAATGGGGG	AAATGCCTAA	CTCAGGAGGT	TGAGGTAAGG	ACAAAAGGAA	TTAATACATG	420
GAAAGTGCCT	GGAACAGTGC	CTGGCACAGT	CTGCTTTCAG	AAAAAGCTGC	AAGGTGGCTA	480
CTCTCAGCAG	ATATAAGTTA	ATGCAGGAAC	AGCAACTAGC	AGCTCTTGGA	CATGCAATAT	540
ATTATATATT	TTTTGCATCT	TTTACCCTTC	ACGGCACTGA	GCCTCACAAAT	CCGTTGACCT	600
CGAG						604

(2) INFORMATION FOR SEQ ID NO:605:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 495 base pairs
- (B) TYPE: nucleic acid

(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:605:

GCGCAGCCAG	CGCCTGCCTC	CGACTCGACT	CCACACCTGC	TTGCTACAGC	GGGTGAGGAA	60
GCAGGAAAGG	GGGAGGGAGG	GATGTCGTCT	GGATTCTGT	AATAATTGT	TTCATTGTTT	120
CCAATCGACT	TAGTCACCAG	GTAAATAGT	AGCATAGACC	TTTCAAAAAA	GTAGCTAGCT	180
TATAAGTAGA	TGTATTGAAA	ACACCTGCTT	GTTGAGTCGT	AGACAATTCC	TCATTTACTG	240
TGTGAACCTCT	AGGGGGTGAA	ACACGGGCGG	AGAGCGGCTG	TGAGCTCAGC	CGGCTCCATC	300
CCCACAGCGG	CCCAGGGTCA	CTCGGGGCCA	TTAATCAGGC	CGCAGAGCTG	CCCTCTGAGC	360
CGGGCCGCCA	GCGCCACAG	GGCCAGACC	AGGGCTCCCT	GGGCGGGATG	TTTTAAATCG	420
CACAGGGACA	AAGGAAAGGA	AAGACGCTGG	GGCCCAAGCC	CGAGCTTATG	AAACGTTATC	480
AAGGAGCGAC	TCGAG					495

(2) INFORMATION FOR SEQ ID NO:606:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 331 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:606:

GAATTCGGCT	TCATGGCCTA	GACTTCCAAG	GACATGCTTC	GAATCTGGC	CCAAGCCAAG	60
AAGGAATGCT	GGGATCGGTT	CCTCCAGGAG	AAGTTAGCTT	CAGAGTTCTT	TGTGGATGGA	120
CTTGATTCTG	ATGAGAGGTG	ACTACAATTG	CAAAGTAGAA	TTTGCTTTGA	CACCTGATGC	180
CAGGACAATA	GTATGTTACC	ATCCTTCTAT	AGACATTCCA	TATGAACGCA	CAAAACCTAT	240
CCCTTGACCA	GATCCTGTGT	ATAATAATGA	AGAAACACAT	GGTCAAGTGC	TGAAAACCTAT	300
AGAAGAAAAA	AGTGAACACC	TGGAGCTCGA	G			331

(2) INFORMATION FOR SEQ ID NO:607:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 632 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:607:

GAATTCGGCC	TTCATGGCCT	ACTGCCTCGG	CCTCCCGAGT	AGCTGGGACC	ACAGACGCCC	60
ACCACCATGC	CCGGCTAAAT	TTTTGTATTT	TTAGTAGAGA	CGGGTTTCAC	CGTGTAGCC	120
AGGATGGTCT	CGTTCTCCCG	ACCTCGTGAT	CCGCCCGCCT	CGGCCTCCCA	AAGTGTGGG	180
ATTACAGGCG	TGAGCCAAC	CGCCCGGCCA	GGAATCCCTC	CTCTGTCTGA	CCTAACTGCC	240
CTCTGCCCTG	GAGCTGCTCA	GCCTCTATCA	ATTTTCTG	CTCTCAGCGA	ACGTTTTCAT	300
TCAGTTGCAA	GACACAGAAA	CTCAAATTCA	AACCTGCTTA	CACAAAATAG	TGAATGTACT	360
GGCTCATGCA	CTTTTAAAG	AGATGAGGTC	TGTTGTGCTG	CCCAGGCTGG	ATGTGAACTC	420
CCGGGCCCAA	GAAATTCTCC	TGCCTCAGTC	TCCTGAGTAG	CTGGGACCAC	AGGAGCATGA	480
CTGTAAGTCC	TGGTGTGAAT	CAGGCTCCAG	AAACAGCTTG	ATCCTGTTTC	CCAACAGTAT	540
GGTCAAAACT	CATTCTCTCT	TCTGTCTTCT	TCTCTATGAC	AGGTGCTCCC	TAAGAAGTGA	600
CAAAGAAGGC	CACTAACAGC	TCTGGGCTCG	AG			632

(2) INFORMATION FOR SEQ ID NO:608:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 531 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:608:

```

GTATNGNTGA AAATAAGAAA AAATATTCT GAAATTCGGG AACTTGAGAA CATAGAAGAA      60
CACCAGTCTG TAGATATTGC AACTTTGGAA GATGAAGCTC AGGAAAATAA AAGCAAAATG      120
AAAATGGTTG AGGAACATAT GGAGCAACAA AAAGAAAATA TGGAGCATCT TAAAAGTCTG      180
AAAATAGAAG CAGAAAATAA GTATGATGCA ATTAAATTCA AAATTAATCA ACTATCGGAG      240
CTAGCAGACC CACTTAAGGA TGAATTAAAC CTTGCTGATT CTGAAGTGGA TAACCAAAAA      300
CGAGGGAAAC GACATTATGA AGAAAAACAA AAAGAACACT TGGATACCTT AAATAAAAAG      360
AAACGAGAAC TGGATATGAA AGAGAAAGAA CTAGAGGAGA AAATGTCACA AGCAAGACAA      420
ATCTGCCCAG AGCGTATAGA AGTAGAAAAA TCTGCATCAA TTTTGGACAA AGAAATTAAT      480
CGATTAAGGC AGAAGATACA GGTAGAACAT GCTAGTCAAG GAGACCTCGA G          531

```

(2) INFORMATION FOR SEQ ID NO:609:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 330 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:609:

```

GTGACTTTGG AACCTTGAGA GTTAGATGAA TAAATCAGAA AAATGGAATT AAATGTATCT      60
ACTTTATTAT TGGTAAATCT GGTTAGGATG TGCAGCCCTA ATCAGGCTTC CTTAATTCCT      120
TCTCCACTGA GTCTGGACCA GCACTCTCCA GTAGAACTTT CTATGATGAC GGAAATCCTC      180
TGTGTCTGCG CTGATCAGTG TGGTAGTTAC TGGCCACATG TGGCTGTTGA GTACTTGAAA      240
TGTGGCCAGT GTGGTGATGG AATTGTGTTT TTAATCTTAT TTAATTAAAT TTTAAATAGC      300
CAAATGTGGC TAGTGGCTGT TGTACTCGAG                                     330

```

(2) INFORMATION FOR SEQ ID NO:610:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 345 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:610:

```

GTGGAGGCTT TCTTGATCAT GGATGGTGAA GATATACCAG ATTTTTC AAG TTTAAAGGAG      60
GAAACTGCTT ATTGGAAGGA ACTTTCCTTG AAGTATAAGC AAAGCTTCCA GGAAGCTCGG      120
GATGAGCTAG TTGAATTCCA GGAAGGAAGC AGAGAATTAG AAGCAGAGTT GGAGGCACAA      180
TTAGTACAGG CTGAACAAAG AAATAGAGAC TTGAGGCTG ATAACCAAAG ACTGAAATAT      240
GAAGTGGAGG CATTAAAGGA GAAGCTAGAG CATCAATATG CACAGAGCTA TAAGCAGGTC      300
TCAGTGTTAG AAGATGATT AAGTCAGACT CGGGCCGAAC TCGAG                                     345

```

(2) INFORMATION FOR SEQ ID NO:611:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 633 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:611:

```

GAATTCGGCC TTCATGGCCT AAATGACCAN ATCGAGAGGG AGGACTATGA GGACTTTGAG      60
TACATTCGCGC GCCAGAAGCA ACCCAGGCCA CCCCCAAGCA GAAGGAGGAG GCCCGAGCGG      120
GTCTGGCCAG AGCCCCCTGA GGAGAAGGCC CCGGCCCCAG CCCCAGGAAG GAGGATTGAG      180
CCTCCTGTGA ACCTCTGCTG CCCCCGCTGC CCCCTGACTA TGGTGATGGT TACGTGATCC      240
CCAACTACGA TGACATGGAC TATTACTTTG GGCCTCCTCC GCCCCAGAAG CCCGATGCTG      300
AGCGCCAGAC GGACGAAGAG AAGGAGGAGC TGAAGAAACC CAAAAAGGAG GACAGCAGCC      360
CCAAGGAGGA GACCGACAAG TGGGCAGTGG AGAAGGGCAA GGACCACAAA GAGCCCCGAA      420
AGGGCGAGGA GTTGGAGGAG GAGTGGACGC CTACGGAGAA AGTCAAGTGT CCCCCATTG      480
GGATGGAGTC ACACCGTATT GAGGACAACC AGATCCGAGC CTCCTCCATG CTGCGCCACG      540
GCCTGGGGGC ACAGCGCGGC CGGCTCAACA TGCAGACCGG TGCCACTGAG GACGACTACT      600
ATGATGGTGC GTGGTGTGCC GAGGTCACCTC GAG                                     633

```

(2) INFORMATION FOR SEQ ID NO:612:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 296 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:612:

```

AAATACTAGA GATAAAGTAG ATTCATGGCT TGGTAAGGAA ATTTTAAGCA TTCCTTCAAA      60
GATTGACGTG CTAAAATAAG CATTGATGTT TTGAGTTTTT TTACACCTAG GATTTTTAGC      120
TTGGGTGTGT AGGTGAAGGC CAAGACTCTC TGCAGAAAAA AGCTTATTTT CAAACTCAGA      180
AAATAAAATG TCAATCATAA AAATCTACTT CAACTTTAGC AAAAAGAAAA AAAAAATCAA      240
CAAAAAGTAT ACTCTGTATG CTGGGATTCC GAGGTTCCAA CAACTGTGTA CTCGAG       296

```

(2) INFORMATION FOR SEQ ID NO:613:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 268 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:613:

```

GATCCAGTGC TGCAGCTTCC TTACTATGAA ATGACAGCTC CACTTCCTAA TAGTGATCC      60
GTGTCTTCCT CACTGAATCA TGTTCCAGAT CTTGAGGCTG GACCCAGCTC ATATAAATGG      120
ACTCACCAAC AACCAAGTGA CTCTGACCTT TATCAGATGA CAGCTCCACT TCCTAATAGT      180
GCATCCGTGT CTTCTCACT GAATCATGTT CCAGATCTTG AGGCTGGACC CAGCTCATAT      240
ATAATGGACT CGCCAACAAC CCCTCGAG                                     268

```

(2) INFORMATION FOR SEQ ID NO:614:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 272 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:614:

```

GGTGGAAGCT ATCCAAGAGG CCTTCTGAAT TCCTCTGACA TATATTTGAG AACTGGGCT      60
ACTGAAAGCC CTAACCCAC TTGGCTGCAT TTTATTTGGT AACCAGTGAG GCAAACACCC      120
TTGCCAGACC CCTACCATCC ATCTTGATGT GGTTCCTGCA CTGGACACTG CTTGGGTACG      180
GGCCTGCCCCA GATCTTGGGA ATGTGGGCAG TGGCTCCTCT GAAGCACCAG TGGGCAGAGG      240
ATGAGTCATG GTATCCTCCC GGCACCCTCG AG                                     272

```

(2) INFORMATION FOR SEQ ID NO:615:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 521 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:615:

```

GAATTCGGCC TTCATGGCCT AGTATTTTTG TAGAGACGGG GCTTCAGCAT ATTGGCCAGG      60
CTGGTCATGA ACTCCTGACC TCAGGTGATC CTCCTGCCTC AGCCTCCCAA AGTGCTGGGA      120
TTACAGGCAT GAACCACTGC ACCCAGTCAA GGGTATAAAA TTTCTACACA GCACAGGCAG      180
ATTCTGGCTG TGGAAGACCC CAAGATTCTT TGGAATTGTG ATGCTTTATT TAATTTAGAG      240
ATTATCTTCT CTGTCCCACT CTTCCCCTTC CTAAAAAGGA CTAGATGCTT GCTGCTTAAT      300
TAGTAAAGCA AATTTAAGAT AATTTTCTGC TTTGAGATT AGGGATAGAT TTTTAAACAT      360
AGTCTTGCTG ATAATGATAG ACATCCTGGG ATGTTGGAAG TTAGGAAACT TGAACCTTTA      420
TTTGACAGCA CTGAGAATTA TGAAGTAGGA AAAGTTAGAG GATCAGAAAA AATAAATTTA      480
TAAATCACA GCTAGGCTTG GCAATATGAG TGGCGCTCGA G                                     521

```

(2) INFORMATION FOR SEQ ID NO:616:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 577 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:616:

```

GAATTCGGCC TTCATGGCCT AGATTGGAAG GTGTGGTAGG CAGAATTCTG GCCCCATGA      60
CTGCCCCCTC CCCTCACACC CCCCAGGTTG CTCCAATGGT TATGTACAGT TGCTTGGCAA      120
AAGGGACTTT GTAGATGTCA TAAAAGGTGA CTAATCAGCT GACTTGAGAG AGTTTATCCT      180
GGATTATCCA AGGGGCCAGG TGTAATTCCA AGAGCCCTCA AGAGCAGAGC TGGAGAGATG      240
CCGCGCAGGA GGCCTGGGTG CCGTTTCGGA GCAGGATGGA AGGCGGTGAA TCCCGCCTCC      300
AGCATGGAGC TCGGAGAGAG CCCTGACTGC AGATGGAGAG GCTGCCCTGG CCGCAGCGCA      360
CGGGGCTCCT GACCCACAAA AATCGCGAGA TAATGAGTTC ATGTTGTTTG AAAGTCCGTC      420

```

ATTTCTGGTA ATTTGCTATA TAAAACTATT GCTATACGAT TAAAACTAA TACAGAAGAA	480
TATTTCTTTA ACATTATGTT AAAAAGGAAA AAAGCTAACA TTTTCTTTAT AGCAAAACAC	540
TGCCATGATT TACATTAAAA TTAGGAACAT ACTCGAG	577

(2) INFORMATION FOR SEQ ID NO:617:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 269 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:617:

GAATTCGGCC TTCATGGCCT AGCACATACA GTATAAAAAA TAATCACCCA CCATAATTAT	60
ACCAAATTCC TCTTATCAAC TGCATACTAA GTGTTTTC AA TACAATTTT TCCGTATAAA	120
AATACTGGGA AAAATTGATA AATAACAGGT AAGAGAAAGA TATTTCTAGG CAATTACTAG	180
GATCATTTGG AAAAAGTGAG TACTGTGGAT ATTTAAATA TCACAGTAAC AAGATCATGC	240
TGTTCTCTAC AGTATTGCGG GCCCTCGAG	269

(2) INFORMATION FOR SEQ ID NO:618:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 469 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:618:

GAATTCGGCC TTCATGGATT CTGCTTGAA TATAGCTACA GAAATAAAGG ATGGACTACA	60
ATGTGGGACA GTGTCTTCTC AGAAACAACC AGCCTTGAAG GCTACAAC TG ACAGGAAGA	120
TTCTGTTTCG AATATAGCCA CAGAAATAAA GGATGGAGAA AAATCTGGGA CAGTGTCTTC	180
TCAGAAACAA CCAGCCTTGA AGGCTACAAC TGACGAGGAA GATTCTGTTT TGAATATAGC	240
CACAGAAATA AAGGATGGAG AAAAATCTGA GACAGTGTCT TCTCAGAAAC AACCAGCCTT	300
GAAGGCTACA ACTGACGAGG AAGATTCTGT TTCGATTATA GCCACAGAAA TAAAGGACGG	360
AGAAAAATCT GGGACAGTGT CTTCTCGAA AAAACCAGCC TTGAAGGCTA CAAGTGATGA	420
GAAAGATTCT TTTTCGAATA TAACCAGAGA AAAAAGGAT GGACTCGAG	469

(2) INFORMATION FOR SEQ ID NO:619:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 448 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:619:

GAATTCGGCC TTCATGGCCT AGTCCGTGTT GTGGTCAGTG TGTGAACTCC AACTGGACA	60
GTAGCTGAGT TTGGGCAGGG ATGAGGAGTG GAGGGGTGAG GTCTAAGGTT CAGAAAAAGT	120
TGTTGTTTAA GAACTTGTTT ACCTGGAGT CAGTTGCAGA CCAGAAATGGA GAAAAGCACT	180
CCTGACTTGA GTTGGGTGTG CTTGGGACTG GATCACCTTT GACCTTCTTT ATTACCTAA	240

TTGGAGGGAA	GAGCAGGGGA	GGCAACACTA	TTTCTCTTGG	GTGTTAGAAG	AAGATTCGAG	300
CTTATTTGGG	CACTGGTCTC	TATCTTTGCC	TTCAGCTGAA	TCAACATCTA	AGATGTTTTA	360
GATGCTTAGC	TAATTCCTCT	TAAAAAAGA	ATAAGCAGAG	GCCGGACGTG	GTGGCTCATA	420
GCTGTAATCC	CAGCAGTGTG	GTCTCGAG				448

(2) INFORMATION FOR SEQ ID NO:620:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 457 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:620:

GAATTCGGNC	TTCATGGCCT	ACTTAAATCC	ATCAAGTTAC	ACAATCGATC	TGTTGTCAGC	60
TGAACAGAAC	CACATTAAAT	TTAAGCCAAA	CACACCAATA	GGAATGTTGG	AGGTAGAGAA	120
GGTAATTTTA	AAGCCAAAAA	TGTTGGATAA	GAAAAAACCT	ACACCTATAA	TACCAGAGAA	180
AACTGTGAGA	GTAGTGATTA	ATTTTAAGAA	AACACAGAAG	ACCATAGTGA	GAGTGAGTCC	240
ACATGCATCG	CTTCAAGAGC	TTGCCCTAT	TATATGTAGC	AAATGTGAGT	TTGATCCGTT	300
GCATACACTA	TTGTTGAAAG	ATTATCAATC	GCAGGAGCCT	CTTGACTTGA	CAAAATCTCT	360
TAATGACCTG	GGACTAAGAG	AATTATATGC	GATGGATGTC	AACAGAGAGT	CCTGCCAAAT	420
ATCACAAAAC	CTAGATATTA	TGAAGGAGGC	CCTCGAG			457

(2) INFORMATION FOR SEQ ID NO:621:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 287 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:621:

GAATTCGGCC	TTCATGGCCT	ACTCTCTGAT	TTACAGATTG	CTAATTAAAT	GGCTATTATT	60
AGTTTGGATT	AATTAGACTT	AAGAAAACAA	CTAAGTGGG	GTTTTTTTTG	TTGTTTTTTT	120
GAGGGTTTTT	TTTGCATGAG	AATTGTATGT	AACAGTGAT	ATGATTATTC	CTGAATGTAC	180
AGACAGAAGT	AAGCTGGAC	ATTGTTAAAT	AGTCCCTGCT	TTAAGGGACT	ACGATAATGT	240
GTACTATGAC	AAACGTGCTT	TATTCTTCTA	ACGCAGTAAG	TCTCGAG		287

(2) INFORMATION FOR SEQ ID NO:622:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 328 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:622:

GAATTCGGCC	TTCATGGCCT	AGTAGGTGTA	TCACAGATTT	CTAATGTAGA	ATGGTCAGTC	60
CAGGAGTAAT	TGTAATTGTG	GAAAAATGGA	GAATTATAAA	ACAAGAATGA	TGTGCAAAAA	120
AGGACACAGT	TGAATTCATC	TGTGTTCTC	TAACTATTT	CATTTACTCA	TTCATCCAAG	180

TTTTGAAAAA TGTGGGAGT CTGAAAAATT CCAGGCACTC TGGATAAATG AGTATGGAAG	240
AATCCTCCAA AAGAACTTTT AGTCTACAGG GGAACATTAA TAAGCAATCA GGGACTTGAG	300
ACCTACAGTG CTGTGGAAGA TTCTCGAG	328

(2) INFORMATION FOR SEQ ID NO:623:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 375 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:623:

GAATTCGGCC TTCATGGCCT AGGACGTTTG GGTGTTTCC ATCTCAAATA AATAAATAAA	60
TAAAAGTCTA TAAAAACAGC TGGGCCCAGG CATTAAAAA AATGTTCCGGT CTTCTAGTTT	120
AGTCTTTTAT TGTCTATGCA AATTCTTTGG CTATTGAACT ATCCAAGCTT TCTCTTTTAA	180
AGCTTTTGGG GAATAGGTTG CAATACATTT CTTGTCTACT GTTCTCTTA GTGTTTCTA	240
ATTCTAACCC ACTGTTTGTG GAATTCTAT TAGATGGTTT TGCAACTTCT GCATCTATCC	300
TCCATGCACC TTCACATTTT CTTACAGTT TTCGTGCTGT TTCCTTGTG TGCTACATTC	360
TGCACAGGAC TCGAG	375

(2) INFORMATION FOR SEQ ID NO:624:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 763 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:624:

GAATTCGGCC AAAGAGGCCT ACCTCAAAGG ATTGGCTAAA AGCAAGCAAC TGGATTGAAC	60
ACCCTAAGAA GAAAGATTCA CACTGCACCA GGAGACATCA GAAAGAATGA AACTCTGCC	120
GCTGTTTGTG TGATCTGTG CACTGAGTGC TTGCTTCTCG TTCAGTGAAG GTCGAGAAAG	180
GGATCATGAA CTACGTCACA GAAGGCATCA TCACCAATCA CCCAAATCTC ACTTTGAATT	240
ACCACATTAT CCTGGACTGC TAGCTCACCA GAAGCCGTTT ATTAGAAAGT CCTATAAATG	300
TCTGCACAAA CGCTGTAGGC CTAAGCTTCC ACCTTCACCT AATAACCCCC CCAAATTCCTC	360
AAATCCTCAC CAGCCACCTA AACATCCAGA TAAAAATAGC AGTGTGGTCA ACCCTACCTT	420
AGTGGCTACA ACCCAAATTC CATCTGTGAC TTTCCCATCA GCTTCCACCA AAATTACTAC	480
CTTCCAAATG TGACTTTTCT TCCCAGAAT GCCACCACCA TATCTTCAAG AGAAAATGTT	540
AACACAAGCT CTTCTGTAGC TACATTAGCA CCAGTGAATT CCCAGCTCC ACAAGACANC	600
ACAGGTGCCC CACCCACACC TTGTGACAAC TACACNAGCT CCACCATCTT CCTCAGCTCC	660
ACCAGAGACC ACAGTNGCCC CACCCACACC TTTTGCAACT ACACNAGCTC CACCATCTTC	720
CTCAGCTCCA CCAGAGACCA CAGCTGCCCC ACCCATCTTC GAG	763

(2) INFORMATION FOR SEQ ID NO:625:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 476 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:625:

GAATTCGGCC	AAAGAGGCCT	AGTAGTTTCT	ATGTGCGGTC	TGGGGTGGGG	GCAAGGCCCT	60
TGTGTTCCAC	TGGTTTCCAC	CACGTTGACA	GCAGTCGCTG	GCAGCAGAGA	GCCATTTCTT	120
GTCATGCTGG	TCTGTTCCAG	GACTCTGTGG	AAGATTCTCT	ATCTCCACTG	GCACAGGAGC	180
AGAGGAAATG	GAAGGACTCA	CAGGCAGAGC	AGATCTCATC	CCCCAAGCCT	GTTGGGAGCC	240
ATTACTTTGG	GTCGAAACAT	TATTGTGAAC	ACTAAGTTCT	TCAGGTTTTG	TAGCACATGC	300
TTTCATTTGT	AGAGTTCGTC	TAGAATATCG	TTTGCTGGGC	CTTCTTTCAA	AGGATGTTGA	360
TCTTCTTGCT	TTATTGGTTT	TTGTGGTCTG	ATACTCTGTT	TTCCCACTAT	ATCTAAATCG	420
TGATCCTAGT	CGAATAAATC	CTGATCGATG	AGAACTCTTT	TGGACGGGGC	CTCGAG	476

(2) INFORMATION FOR SEQ ID NO:626:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 234 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:626:

GCGATTGAAT	TCTAGACCTG	CCTCAACTGT	CTGGTTTCCT	GTAAATAAAA	CACATTGTTT	60
TATATTTTTA	GGGAACAAAA	AGTGCTGCTA	TAGGGTTCAA	AGTTTTCTCT	CTGAACACTT	120
TTCCGAAACA	AATTACCCCA	AAGACACATT	TTGAATATCC	TGGTCACATC	TTTGATCTG	180
TAAATATAC	CTTTTAGTAT	GGCACCTGTT	AAAATGCAAA	GCAAAACCT	CGAG	234

(2) INFORMATION FOR SEQ ID NO:627:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 583 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:627:

GAATTCGGCC	TTCATGGCCT	AGGCCTTGTG	AATCATTCAG	CATAAGGAAC	TGTCAATATT	60
TTTTTGAGCT	GTCAGAAATC	CATTTAGTGA	TTTTCGACAA	TTCAAAAAAA	TATTTCTGAC	120
CGCTTGATTG	AGTTCCTAGT	GAATTAGGGA	AGAAGAGGAA	TAAAAGAAAT	ATATCAATCT	180
AAATTATGAA	CCCAGAGTCT	AGCTTCCTGA	ATTCTTCTCT	GTGCTTAAAC	GAACAACAGG	240
ATGTTGAGGT	TCAAAAATAC	TCTTCTCTAT	TTCCCCCCTT	TCCTTCCCTT	TTCTTTCCTT	300
CTCTTCCATT	CCTCGAAAAG	ATAATAAAAC	AGAATGTGCC	TAGAGCTTCT	GGAAAGAATA	360
CAGTCCTGCT	GATACTAGAA	CTCAGTGAAA	TTTGCAACCAG	ATTTCTGAGC	TACAGAAGTG	420
AAGATAATTC	ATTTATTTCA	AGCCACTGAG	TTTGTTGTAA	ATTTGTTACA	GTAGCAATAA	480
AAATCTAATA	CATGCCTTCT	ATACCAGAAG	TACACATCCA	CGTGACCATT	CCTGTCCTCA	540
CCCCACACAC	ACATACACAC	ACACACACAC	ACGCACACTC	GAG		583

(2) INFORMATION FOR SEQ ID NO:628:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 295 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:628:

GAATTCGGCC	TTCATGGCCT	ACCTGCCTCG	AGTTCCTACT	GCCCCCGGGC	GGCCTGCACA	60
GAGCTGCTGC	CCTCCAGAGA	CTGTGAATCC	CAAGCCTGAC	TCAGTGGACT	GCTTCCTGTT	120
CCCCCTCCCTC	CTCTTCCTCA	CCTTGTTCTG	CACCCTCAAG	CCTTTCTCCA	ATGCCTCCCA	180
GGAGGATTTG	GGGACTTTCT	CCCTGGGGCG	CCCAGATCCA	GCTCGGAGGC	CTCACTGGGA	240
CCTGGCAAGG	CCTGACCTCC	CGCCCAAAC	TGCTTCTGTA	GCCCCCTAC	TCGAG	295

(2) INFORMATION FOR SEQ ID NO:629:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 344 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:629:

GAATTCGGCC	TTCATGGCCT	AACCTGTTGC	TTCCCTGGG	ACTGAAGGCA	GAAGTGACTC	60
CCGAAATTCT	CTTCTGGAC	TCAGAAGGAA	ACCAAAGCAA	TTGATGACAC	CGCATCCCAT	120
ACTAAAGCT	ATGGAAGAGA	GAGCAATTCA	ACGAGCTGAA	TGTAGGCGGA	TCTTGGCAGA	180
GAAGNAGAAA	AAACAAGAAG	AAGANAAATT	GGCCAGTTA	AAGGCCCAAG	AGGAGGAACG	240
TCAGAAAAGG	GAGGCAGAAG	AAAAGGAGGC	ACAGCTTGAA	AGAAAACGAG	AAGAGAAGAG	300
ACTGAAGAAA	ATGAAAGAAC	TTGAGAAGCA	GAAGAGAACT	CGAG		344

(2) INFORMATION FOR SEQ ID NO:630:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 257 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:630:

GAATTCGGCC	TTCATGGCCT	AGTTCTTCCT	TAGGAACAAG	GGCAGGACCT	CAAACAGTCC	60
AGAGGAGAAG	CCTGGGGTGG	TCAGGGAAGG	CTTCCTGGCT	GAGAGGACAG	GCTTAGGGGC	120
ACCTTGAAAG	TTCAGGCTGA	CTGGGGCTAG	GGGCATGTGG	GTAACAGGTT	AAAGGGGGGG	180
GGGCTGAAA	ATGCAGACAC	CAAAGACCCT	TCAATATGAG	GCCAAGAAAG	GAAGGTTTCAG	240
AACAGGGATC	ACTCGAG					257

(2) INFORMATION FOR SEQ ID NO:631:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 326 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:631:

GTTCCAAATC	CATGGGAACC	AGCACAGGAG	CTACAGCAAA	TCATGGCACT	TCTGCAGTAG	60
CAATTACTAG	CCATGATTAC	CTAGGACAAG	AAACTTTGAC	AGAAATCCAA	ACCTCACCAG	120
AAACATCAAT	GAGAGAGGTG	AAAGCGGACG	GAGCTAGCAC	CCCCAGGTTA	AGAGAACAGG	180
ACTGTGGTGA	ACCTGCCTCG	CCAGCAGCAT	CCATCTCCAG	ACTCTCTGGG	GAACAGGTCC	240
ACGGGAAGGG	CCAGGCAGGC	AGTGTATCTG	AAAGTGCGCG	GAGTGAAGGA	AGGATTAGTC	300
CAAAGAGTGA	TATTACTGAG	CTCGAG				326

(2) INFORMATION FOR SEQ ID NO:632:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 480 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:632:

GAAAAAATGG	AAGAATTTGT	TTGTAAGGTA	TGGGAAGGTC	GGTGGCGAGT	GATCCCTCAT	60
GATGTACTAC	CAGACTGGCT	CAAGGATAAT	GACTTCCTCT	TGCATGGACA	CCGGCCTCCT	120
ATGCCTTCTT	TCCGGGCCTG	TTTAAAGAGC	ATTTTCAGAA	TACACACAGA	AACAGGCAAC	180
ATTTGGACAC	ATCTCTTAGG	TTGTGTATTC	TTCTGTGCC	TGGGGATCTT	TTATATGTTT	240
CGCCCAAATA	TCTCCTTTGT	GGCCCCCTCTG	CAAGAGAAGG	TGGTCTTTGG	ATTATTTTTC	300
TTAGGAGCCA	TTCTCTGCCT	TTCTTTTCA	TGGCTCTTCC	ACACAGTCTA	CTGCCACTCA	360
GAGGGGGTCT	CTCGGCTCTT	CTCTAAACTG	GATTACTCTG	GTATTGCTCT	TCTGATTATG	420
GGAAGTTTTG	TTCCTTGGCT	TTATTATTCT	TTCTACTGTA	ATCCACAACC	TATTCTCGAG	480

(2) INFORMATION FOR SEQ ID NO:633:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 307 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:633:

GAATTCGGCC	TTTATGGCCT	AGCGGGATCG	TATCACTACG	CACGTGGCGT	CAATGACAAA	60
GACGCCTTCC	CCACGGGACA	GGCCCTGGGA	ACTGCGGGGC	AAGGTGTGGG	CACGGCGGGT	120
CGCCTTCCAA	CCCTCCAGGG	TCTCCGGTCC	TGCCCCCTCT	CCAAGACCCA	GAGATTCTCT	180
CCATCCGGTG	CCTCCGGGAG	CCCAGGGTCT	GGGGAGTGTC	TGGCTATGGC	GGGGCGGCTG	240
CTTTTATAGG	GAGGGAATCC	AGCATTTGGG	AAACCAGATC	TGTTCTCCTT	CTTTCCCTTC	300
CCTCGAG						307

(2) INFORMATION FOR SEQ ID NO:634:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 458 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:634:

CCTCTGCAAG	AAATGCCTAA	GCGTATTATC	AGGAAGTGG	ATTATAAAAT	GTTTCCAGAT	60
CAAATTAAGC	ATCTACAGGT	GAATTAATAT	AGAATTAAGC	TTAGAAAGCT	TAAGTAGAAG	120
TTGAATGAAT	TGTGTTTCATT	CTTTGAAACC	CATTGATTTG	CAAAACCAAT	ATTCCACTGT	180
CTATAGGAGG	CAATTCAGAC	TGAAAATAAT	TTAGAAAAAA	AAATAGTCCA	GAAAAAATAA	240
TAGTTCTAGA	GATAAATAGG	TCATTTGAAG	ACTAACCTCT	GCCATTAGGG	GTTTCTAAAG	300
ATAGGCTGAC	TCTATCTATT	TAATAATTAT	TTGTTCATT	AACTCCTTGC	ATATAGAATT	360
GTAAGTATA	CCAGCCAGGT	ACGGTGGCTC	ACGCCTGTAA	TCCCAGCACT	TTGGGAGGCC	420
AAGGCGGGCA	GATCACCTAA	GGTCGGGAGT	CTCTCGAG			458

(2) INFORMATION FOR SEQ ID NO:635:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 343 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:635:

GAATTCGGCC	TTCATGGCCT	ACCCACTCTC	ACTTTGTACC	TCTGTCAGTT	ATCTCCTCTT	60
TACCCTTCTT	TCAACGAGCA	TACCACCGGC	CCTCCCAGCA	CCTATGGCCC	AAGCCAGTTG	120
TTTGCAAATT	TTATACTGTG	ACACAGGACA	ATTTACACAC	ACATACACAG	TTTCACTTGT	180
GACATACCTT	TTTTTTGAGA	TGGAGTCTCA	CTTCATTGCC	CAGGCTGGAG	TGCAGTGGTG	240
TGATCACACC	TTATTGCAGC	CTCAAACTCC	TGGGCTCAAG	TGGTCTTCCT	GCCTCAGCCC	300
CCCTAGTAGC	CAGGATTACA	GGCGTGCACC	ACCATTCTTC	GAG		343

(2) INFORMATION FOR SEQ ID NO:636:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 402 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:636:

GTGGATAACA	AACAAACAAA	TCTGATGCTC	CCTGAGTCAA	CTGTTTATGG	TGATGTGGAC	60
CTTAGTAACA	AAATCAATGA	GATGAAAACC	TTCAATAGCC	CAAATCTGAA	GGATGGGCGT	120
TTTGTCAATC	CATCAGGGCA	GCCTACTCCT	TACGCCACCA	CTCAGCTCAT	CCAGTCAAAC	180
CTCAGCAACA	ACATGAACAA	TGGCAGCGGG	GACTCTGGCG	AGAAGCACTG	GAAACCACTG	240
GGACAGCAGA	AACAAGAAGT	GGCACCAGTT	CAGTACAACA	TCGTGGAGCA	AAACAAGCTG	300
AACAAAGATT	ATCGAGCAAA	TGACACAGTT	CCTCCAACCTA	TCCCATACAA	CCAATCATAC	360
GACCAGAACA	CAGGAGGATC	CTACAACAGC	ACAGAGCTCG	AG		402

(2) INFORMATION FOR SEQ ID NO:637:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 290 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:637:

GCTTCCTCGC	AGCAAGCGGC	TGGAGATAGA	GAAGAGCTTA	CTGGTGCGAG	CGTCCGTCGA	60
CCCCGTCGCC	GCTGACCTAG	AGATGGCAGC	CGGTCTCACC	GACATATTTT	AGCATGATAC	120
ATACTGTGGT	GATGTCTGGA	ACACCAACAA	ACGCCAGAAT	GGCAGACTCA	TGTGGCTCTA	180
TCTCAAATAC	TGGGAACTCG	TTGTCTGAACT	GAAGAAGTTT	AAGAGAGTAG	AGGAAGCCAT	240
ACTAGAAAAG	TAAGACAAGA	GTGAAATCAA	ACTGCTTTTA	GTGACTCGAG		290

(2) INFORMATION FOR SEQ ID NO:638:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 463 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:638:

GTCGAGAAAA	TGGGGATAAT	GGAGAAATTG	TGGGCAAGCT	GGCTTCCTGG	GAAGGGACTA	60
ATTGAACAAG	ACAATGATT	ATCTTTTCGG	GGTTCAGAGG	CAGCTTGTTA	ATTCGAATTA	120
TTTTCTTTAT	TTTTGCCCCAC	AAGTGTTTGG	TTGTCTTTT	CTCTGGCTTT	TTACCTGATC	180
AGGCTGCAAG	CTGCAAAGGT	GTGGCTTGTG	CTGCAGATTT	GTAATAAAAG	ATGACAGGTG	240
AGAGAGACAG	TGGTGGAAC	GGTAGAGCTT	GCACACCCAC	ACGGTGTGGC	TGCTCGGGAG	300
GCTGTCTAGT	GCACCTGCCA	ACAGAGCACA	GATATCCTCT	CTTCCTCATT	TCAGATTTCCT	360
CCTTCCAGCT	GTTTACTAAA	CAGCAACAAA	AACACCCTCT	TGGCTGTAAC	TTGTCAAATA	420
AAGTCCCTGC	AAAGTGATA	AGATTTTCCT	CCCCAACCTC	GAG		463

(2) INFORMATION FOR SEQ ID NO:639:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 513 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:639:

GCGAGGGAGA	TGGCAGCCTG	GGCTTTAGCA	GCAGGGAGGA	AGGTGAANAA	AGAACCGGGG	60
CTTGCAGCAG	AGGTGGGTTC	TGCCTTAAAG	GCAGAGACCC	CCAACAACCTG	GAATGCCACG	120
GAAGACCAGC	ATGAGCCTAC	CAAACCTTTG	GTTCCGAGGG	CTGGAGCTAA	TTCTCGCTCC	180
AGGAGAAAGA	AGCAGAAGAA	GAAGTCCAGG	CAGGAAGCAG	TGCCCTGGAA	AAAACCCAAA	240
GGCATCAATT	CCAACAGCAC	AGCTAACTTG	GAGGATCCTG	AGGTGGGTGA	TGCTGAAAGC	300
ATGGCGATCT	CAGAGCCGAT	CAAGGGCAGC	AGAAAGCCCT	GTGTGAATAA	GGAGGAGTTG	360
GCTTTGAAGA	AGCCCATGGC	GAAATGTGCC	TGGAAGGGTC	CCAGAGAGCC	ACCTCAGGAT	420
GCCCCGGCAG	AAGCCGAGAG	CCCAGGAGGC	GCCTCTGAGT	CAGACCAAGA	TGGTGGCCAT	480
GAAAGCCAC	CAAAGAAGAA	GGCCGAGCTC	GAG			513

(2) INFORMATION FOR SEQ ID NO:640:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 510 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:640:

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GAATTCGGCC TTCATGGCCT ACACCTCAGC CTCCAGAGCA GCTGGGACTA CAAACGTGTG      60
CCACCATGCC GGGCTAATTT TTGTATTTTC AGCAGAGGTG GGGTTTCACC ATGCTGCTGG      120
CCAGGCTGGT CTCGAACTCC TGGCTTCAAG TAATCTGCCC ACCACAACCT CCCAAAGTGC      180
TGGGATTACA GGTGTGAGCC ACTGCGCCCA ACCAAGAGCT CCTTTTGTGTT TTTCTTTTTT      240
TGTGAATTCG GATTCTTTAT ATTCAGGAGT TTTACTTAAA CTTTGAATCT GAAAGAACT      300
TTAGGAGGAG CTCATAGATT TGTGGGAAGA AGCAAATCTA CATTATTTTC TCTCTTCTAA      360
AATCATATTC CATGTATTTT GATCTTTTAC TGAATTTTAA CACATTGTTT CATCACTAAC      420
ATAAAGTGTT TCAATAGTTT TTGTAACCTA CACACAAATA CTGGATTATA AAGTTATATA      480
CCTGAGTATA TTTTATGGC AGGTCTCGAG      510

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(2) INFORMATION FOR SEQ ID NO:641:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 308 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:641:

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GAATTCGGCC TTCATGGCCT AGTGTTCCTA GCCAGTCTCT ATTCTCTCAC CTAACACTCT      60
CAAGGAGATA GAAGCTTCAG CTGAAGTCTC ACCCACCACG ATGACCTCCC CCATCTCACC      120
CCACTTCACA GTGACAGAAC GCCAGACCTT CCAGCCCTGG CCTGAGAGGC TCAGCAACAA      180
CGTGAAGAG CTCCTACAAT CCTCCTTGTC CCTGGGAGGC CAGGAGCAAG CGCCAGAGCA      240
CAAGCAGGAG CAAGGAGTGG AGCACAGGCA GGAGCCGACA CAAGAACACA AGCAGGAAGA      300
GGCTCGAG      308

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(2) INFORMATION FOR SEQ ID NO:642:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 305 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:642:

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GAATTCGGCC TTCATGGCCT AGTTAGATGA AAATCTAAAG GATGAATACT TTGAGGAAAT      60
CATGGAAGAA TATGAAGATA TTAGACAGGG CCATTATGAG TCTCTCAAGG AGAGGAGATA      120
CTTACCCTTA AGTCAAGCCA GAAAAAGTGG TTTCCAAATG GATTGGCTGT CTGAACCTCA      180
CCCAGTGAAG CCCACGTTTA TTGGGACCCA GGTCTTTGAA GACTATGACC TGCAGAAGCT      240
GGTGGACTAC ATTGACTGGA AGCCTTTCTT TGATGTCTGG CAGCTCCGGG GCAACCCAC      300
TCGAG      305

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(2) INFORMATION FOR SEQ ID NO:643:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 301 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:643:

GCGATTGAAT TCTAGACCTG CACCCAGCCA AACTGAGAG ATTTTAATGA GTACTTTTAT	60
CCACCTGACC ACCATCATT CCTATCACCT GTCATTCTTC ATCCACCCTA CATCCATCCT	120
TCATCCCCC ATCATCCACC CATCTATCCT TCATCCATCC ATTCATCATG GAACCATTAT	180
CCATCCAAC ATCATCCAGC CAGCCAGAAA TGACCCATTC ATCTTCATCT CTCATTTTCCT	240
CTCTCTAAAC CAGTTCTTAA TCTGGGGCCA AAGTCCTACC CACACATCCC TTAGTCTCGA	300
G	301

(2) INFORMATION FOR SEQ ID NO:644:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 408 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:644:

GAATTCGGCC TTCATGGCCT AGATCCCCCG TGGAGAAAGC AGTGACACAT TCACACAGCT	60
GTTCCCTCGC ATGTTATTTT ATGAACATGA CTTGTTTTCG TGCACTAGAC ACACAGAGTG	120
GAACAGCCGT ATGCTTAAAG TACATGGGCC AGTGGGACTG GAAGTGACCT GTACAAGTGA	180
TGCAAGGAG GGTTCAAAG AAAAAGGATT TTGTTTAAAA TACTTTAAAA ATGTTATTTC	240
CTGCATCCCT TGGCTGTGAT GCCCCTCTCC CGATTTCCTA GGGGCTCTGG GAGGGACCCT	300
TCTAAGAAGA TTGGGCAGTT GGGTTTCTGG CTTGAGATGA ATCCAAGCAG CAGAATGAGC	360
CAGGAGTAGC AGGAGATGGG CAAAGAAAAC TGGGGTGCAC GCCTCGAG	408

(2) INFORMATION FOR SEQ ID NO:645:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 364 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:645:

GAATTCGGCC TTCATGGCCT AGTTATGTGA TTAGGAGTAG GGTTAGGATG ANTGGGAAGA	60
AGAAAGAGAG GAAGTAAAGT TTAATTATGC CTTTTGGGT TTATTATCCC TGATGCATGT	120
GGCCCCCAC TGCTGTGTCC TTCTCCTGTT GGCTAGGGTT AGACCACACA GGCTAAACTA	180
ATTCCGATTG GCTAATTTAA AGAGAATGAC GAGGTAAGTG TTTTGGCGGG AAAAATGTTT	240
ATGACAGAGC AGGTAATAGG AATGAGTTAG GGTGGAGTAG GTAATCGGAA TGAGTCAGGG	300
TGGAGCAGGT AATTGGAATG AGTCAGGGTA GAGCAGGTAA TCGAAAAGG TTGCTTTGCT	360
CGAG	364

(2) INFORMATION FOR SEQ ID NO:646:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 320 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:646:

GAATTCGGCC	TTCATGGCCT	AGGAGTGCAT	TTGGATCTAG	TGTTTTCTAT	CAATCTGTCT	60
GCTGATGTGG	CACTACTGCA	CCATTTACCA	CAACATTAGA	ATATGTCTGA	GTAACGGTT	120
GGCTTAGATT	TTTTGCATTG	AGTCCCACCC	CATTTTCCAG	AACTTTCATG	GCTATTCTTA	180
TATGTTTGT	TTCCGTAAGA	TCTTTAGGAT	CAATTTGTCT	AGTTCTAAAG	AGGAAATTCT	240
GATATTATTG	ATTTAGTAAC	TTTCCATGAA	AAAAACCTAC	CATCACAGGA	AAGATGCACA	300
TTAATTACAG	GTAGCTCGAG					320

(2) INFORMATION FOR SEQ ID NO:647:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 267 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:647:

GAATTCGGCC	TTCATGGCCT	AGTCAGTGGC	TAGATTGATT	GATCCTCCAG	AATTAGACAC	60
TCACATGTTA	ACACCAGTCT	CAGTTGGAGG	GCTGATAGTA	AACCTTATTG	GTATCTGTGC	120
CTTTAGCCAT	GCCCATAGCC	ATGCCCATGG	AGCTTCTCAA	GGAAGCTGTC	ACTCATCTGA	180
TCACAGCCAT	TCACACCATA	TGCATGGACA	CAGTGACCAT	GGGCATGGTC	ACAGCCACGG	240
ATCTGCGGGT	GGAGGCGAGG	TCTCGAG				267

(2) INFORMATION FOR SEQ ID NO:648:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 321 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:648:

GAATTCGGCT	TCATGGCTAC	TTTTGGTAAA	GCATACCCAA	CCTTCAGTTA	GAATATCTCC	60
TGATAATAAG	AAAGATCTCA	TTGAAATTTA	TTAATTCTTT	TGTGTCTAGT	AGATAACTTG	120
GATGGCACAC	AGTGCTTTGA	TTTTTACCTG	CCCAGAATTT	AACTCCTCAT	CCTATCCTAC	180
ATGATTTTCT	TTTTCTCTC	CCCCTTCCTC	TTTATTCCA	TGTCACTGGG	AATGGCAGGT	240
CTTGACCAAA	GTAATGGCAG	GTCTTGACC	AAGCAAGCCA	GAAACCTGAG	CTTTAGTCTT	300
TATTCCTCCC	CACTTCTCGA	G				321

(2) INFORMATION FOR SEQ ID NO:649:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 559 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:649:

GAATTCGGCC	TTCATGGCCT	AGAGGAAGTG	AACGGATGGG	GCCTCATCCT	CCTGCCTCCC	60
TAAAGGGTGA	GGGTGGAAGG	ATGGGGCTGT	GCCCTCTTAG	GGCAGGGAAA	AACAGCTTGG	120
AGGGGTTTCT	GCCATCAGAG	ATCCCATAGG	AGGCAGGTCA	GTCTGCAGA	ATTCTCCCC	180

AGTCTGGCCT	CCAGCCTCCC	TGGCCCCTTT	CTAGAGGCCT	CCATCCCACT	GGCGGCTTGC	240
TCCTGCCACC	GGGCCTCTGC	ACAGTCACCT	CCTGCAGCCT	GGGGTGTGTC	GCCTCTCCAC	300
GTCTTGATAT	TTTTGCTGGA	ATGCAGACGA	TACTATATTT	ACCGTATAAT	ATATTATCAG	360
CTCTCCTATA	TCTCAGTCAA	TTTACATAGT	TTAAAATAGA	ACATCTTATT	AAAAACATCT	420
AGATATACAC	AGATTAGGAA	ACGCTTACAA	CATACAAATA	CACAAACTAG	AAATAAATCT	480
TTAGCATACT	GGTATATACA	ACAGTGTGAT	ACAATAAATA	ATTTCATTCA	TGCTCTATCT	540
ACACATCATA	TTGCTCGAG					559

(2) INFORMATION FOR SEQ ID NO:650:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 477 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:650:

GAATTCGCC	TTCATGGCCT	AGGGAGACTG	AGGCAGGCAG	ATCACCTGGG	GTCGGGAGTT	60
CGAGACCAGC	CTGACCAGCA	GGGAGAAACC	CCGTCTCTAC	TAAGAATAGA	AAATTAGGTG	120
TGGCGGTGCA	TGCCTGTGGT	CCCAGCTACT	CGGGAGGCTG	AGGTAGGAGA	ATCGCTTGAA	180
CCCGGGAGGC	GGAGGTCATG	GTGGGCCGGG	ATTGCACCAT	TGCACTCCAG	CCTGGGCAAC	240
AAGAGTGAAA	CTCCATCTCA	AAAAAATAAA	AGCCTAGCCT	CCCAAAGTGC	CAGGATTACA	300
GGCATGAGCC	ACCGCGCCTG	TCTGTCCGCC	CGTCTTCTTT	TTTAAGAGCA	AGAAAAGGTT	360
TCCCAGAAGT	ACTCTGGTAG	ATTCTTATCA	CACACACATT	CCTAAACCAG	TTACTGGCAA	420
AGAAAATAGA	ATTATCATGA	TTAATTAGCA	TATTCTGAAG	NACATGCTTC	CCTCGAG	477

(2) INFORMATION FOR SEQ ID NO:651:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 414 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:651:

GTGTGAACCT	ACGGGAAGGC	GGCCGCCTGC	ACCTCTGTGC	GGAGACCAAG	GATGATGCCC	60
TAGCATGGAA	GACAGCACTG	CTGGAGGCAA	ACTCCACCCC	GGTGCGCGTC	TACAGCCCGT	120
ACCAAGACTA	CTACGAGGTG	GTGCCCCCCA	ATGCACACGA	GGCCACGTAT	GTCCGCAGCT	180
ACTACGGACC	GCCCTACGCA	GGCCCTGGCG	TGACGCACGT	GATAGTGGCG	GAGGATCCCT	240
GCTACAGCGC	CGGCGCCCCT	CTGGCCATGG	GCATGCTTGC	GGGAGCCGCC	ACTGGGGCGG	300
CGCTGGGCTC	GTCATGTGG	TCGCCCTGCT	GTCTCTGAGC	CCTGGGACTC	GGAGCACTGA	360
CCCCTGCGCT	TGGATTGCTA	GACTCCTCTT	CCTCCTGGAC	CCCATCCTCT	CGAG	414

(2) INFORMATION FOR SEQ ID NO:652:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 325 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:652:

GAAGGAAAAC ATGGGCACAG GGGATTTTAT CTGCATTTC	ATGACTGGAG GGGCGCCCTG	60
GGGGTTCAGA TTGCAAGGTG GCAAGGAGCA GAAGCAGCCC	TTACAAGTTG CAAAGATTCTG	120
AAATCAGAGC AAAGCCTCTG GGTCTGGGCT CTGTGAGGGA	GATGAAGTGG TTTCCATCAA	180
TGGCAACCTT TGTGCAGATC TCACCTACCC TGAAGTCATC	AAGCTCATGG AAAGCATAAC	240
AGACTCTCTC CAAATGCTCA TCAAAGACC ATCCAGTGA	ATAAGTGAGG CTTTGATATC	300
TGAAAATGAA AACTCTAACC TCGAG		325

(2) INFORMATION FOR SEQ ID NO:653:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 443 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:653:

GAATTCGGCC TTCATGGCCT AGGTATTTAG GCTTTTGTCT	TAACAGCAAA TCCTGGCTGT	60
CTGGGGCCTG ATGACTGTGT TCCATGGGTA TCCACTCCCT	GTCCACAGTG TGGGAGCCCC	120
TCAGCTGCTT ATTGCAGGGA CACAGAGCCC GGCATGGTCC	AGAAGGCGGG CTTATGGGGC	180
CTGCAGCACA CAGGGAAGT GAGCCACAC TGTGATAGGA	GGGCAGACAC ACAGGATGTG	240
TTCTGTGTTA CAGGGTTGCC GTGAAGAATT TCATTCTTTT	GCAAGGACTG GAGAGAAAAT	300
TTTATGTGGA AGGTAGCCCT TGGAAATGAC CTCAAAGAAT	AGGTAGGATC TTAGCCTGCG	360
TTTGAAAGCC TGGAAAAAA CAGGATGACA GGATGAAGAG	GCCACAGCAC AGCTGCAGAC	420
AATGGGAGTG CGGAGATCTC GAG		443

(2) INFORMATION FOR SEQ ID NO:654:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 311 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:654:

GGGAGCGCCG GTGGTTCATC CTGACCGATA ACTGCCTCTA	TTACTTTGAA TACACAACAG	60
ATAAGGAGCC CAGGGGAATC ATCCCGTTGG AAAACCTCAG	CATCAGGGAG GTGGAGGACC	120
CCCGGAAACC CAACTGTTTT GAGCTCTACA ATCCAGCCA	CAAAGGGCAG GTCATCAAGG	180
CCTGTAAGAC GGAGGCCGAC GGCNCGTGG TAGAGGGGAA	CCATGTGGTG TACCGGATCT	240
CAGCCCCGAG CCCGGAGGAG AAGGAGGAGT GGATGAAATC	CATCAAAGCC AGTATCAGCA	300
GATCCCTCGA G		311

(2) INFORMATION FOR SEQ ID NO:655:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 346 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:655:

```

GGGGGATACG GATACCCAAA CTTCAATGTT CTTTGATAGT AGGAAGGAGG ACAGTTATAT      60
AGACCATAAG GTGCCTTGCA CAGATTCACA AGTGCAGGTC AAGTTGGAGG ACCACAAAAT      120
AGTAACTGCC TGCTTGCTG TGGAACATGT TAATCAGCTG ACTACTGAGC CAGCTACAGG      180
GCCCTTTTCT GAAACTCAGT CATCTTTAAG GGATTCTGAG GAGGAAGTAG ATGTGGTGGG      240
AGATAGCAGT GCCTCAAAAG AGCAGTGTA AGAAAAACACC AATAACGAAC TGGACACAAG      300
TCTTGAGAGT ATGCCAGCCT CCGGAGAACC TGAACCATCT CTCGAG                      346

```

(2) INFORMATION FOR SEQ ID NO:656:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 116 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:656:

```

GAATTCGGCC AAAGAGGCCT ACTAAACCGT CGATTGAATT CTCGAGGCAG GTCTAGAATT      60
CAATCGACGG TTTAGGCTCC CTATAGTGAG TCGTATTAAT TTCAGAGGTG TATTTA      116

```

(2) INFORMATION FOR SEQ ID NO:657:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 482 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:657:

```

GAATTCGGCC AAAGAGGCCT AGGGATGAGG GTGAAGAAGG GGAGAGGGTT GGTTAGAGAT      60
ACAGTGTGGG TGGTGGGGGT GGTAGGAAAT GCAGGTTGAA GGAATTCTC TGGGGCTTTG      120
GGGAATTTAG TGCGTGGGTG AGCCAAGAAA ATACTAATTA ATAATAGTAA GTTGTTAGTG      180
TTGGTTAAGT TGTTGCTNGG AAGTGAGAAG TTGCTTAGAA ACTTTCCAAA GTGCTTAGAA      240
CTTTAAGTGC AAACAGACAA ACTAACAAAC AAAAATTGTT TTGCTTTGCT ACAAGGTGGG      300
GAAGACTGAA GAAGTGTTAA CTGAAAACAG GTGACACAGA GTCACCAAGT TTCCGAGAAC      360
CAAAGGGAGG GGTGTGTGAT GCCATCTCAC AGGCAGGGGA AATGTCTTTA CCAGCTTCGG      420
TGGCTGGCAC GTGTTACCAG GCCGAGTGGG ATGACTATGT GCCCAAAC TG TACGAGCTCG      480
AG                                                                482

```

(2) INFORMATION FOR SEQ ID NO:658:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 430 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:658:

```

GAATTCGGCC AAAGAGGCCT AGTCGAGTCC CTTCTGTCCC AGTCGTTCCG GCCTCTTGTC      60
CCACGCAACT CCAGCTTGTA CCATGCCGGT CAAAGGAGGT AGCAAGTGCA TCAAATACCT      120
GCTCTTCGGA TTAACTTCA TCTTCTGGCT CGCTGGCATT GCAGTGCTTG CTATTGGACT      180

```

ATGGCTCCGA	TTCGACTCTC	AGACCAAGAG	CATCTTCGAG	CAAGAGAATA	ACCATTCCAG	240
TTTCTACACA	GGAGTGTACA	TTCTGATTGG	AGCCGGGGCC	CTCATGATGC	TGGTTGGTTT	300
CCTGGGCTGC	TGTGGAGCTG	TACAAGAGTC	CCAGTGCATG	CTGGGATTGT	TCTTCGGGTT	360
CCTCTTGGTG	ATATTCGCCA	TTGAGATAGC	CGCCGCCGTC	TGGGGCTATA	CCCACAAGAG	420
TCGAGTCGAG						430

(2) INFORMATION FOR SEQ ID NO:659:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 290 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:659:

GAATTCGGCC	TTCATGGCCT	AAGAGTACAG	AGATTTCACT	TCATCTTGTC	CTAATGTTTA	60
ATTNAAAGTA	TATTGACACT	AGTAAAGACA	CTTTATTTTA	ATTTGAGGTA	TAAATGTCTA	120
CCTAAAATAG	ACTATTTCCT	TTGAGTCATA	CATTTTAAAT	GTGGTATATA	TTCTTATATT	180
TCAGAAAATG	ATAACTATCA	TAGAAATCTA	ATACTCATTA	ATTTGATTAA	TAATTATTTT	240
TTTCCTCAAA	TTTGAAATA	TCTTTTCCTA	TGTAATGGTC	ATGTCTCGAG		290

(2) INFORMATION FOR SEQ ID NO:660:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 406 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:660:

GAATTCGGCC	TTCATGGCCT	AGTCAGAACT	CTTTGTGTCC	CTGTTTTTGT	GTCCATTTC	60
TGTACCTTGG	CACTTTAAGG	CTTGTCTGTC	AAAATAAAAC	ATTGCATCAT	CACTTGTGAA	120
GGCAGAGCTT	GGGAGTTTGC	ACTGCTAAGA	TGAGGATAGG	AAAGAAATTT	ATGCCGCAGG	180
GCCTTTGATG	CTGCCCACTC	ACCTGTCTGC	ACAGCCAGGG	CACGGCCAGC	GGGAGTGGAG	240
AAGACGAGCG	AGACCAAAAC	CTTGCCGTGG	GGAGGAGGGT	GGCATAGCCA	TTGATAAATC	300
GGGACTTGAA	CTATCCCATC	ACTCTAAAAA	TATTTTTTAT	CTGATTACAA	AAGTAATAGA	360
TGGCCAGGCA	TGATGGCTCA	TGCCTGTAAT	CCCAACACTC	CTCGAG		406

(2) INFORMATION FOR SEQ ID NO:661:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 461 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:661:

GAATTCGGCC	TTCATGGCCT	AGTGGAAGTC	AAAACCTCAGA	GGAGGCATCA	AACCCAGGCT	60
TGGGGGACAA	AACTAAGTCT	TGCCAGAGTC	CTGAAGGATG	AACAACAGTT	AACCAAGCAA	120
GGGATACTGG	AGGGCATGGA	GGCTCTCTGG	CCTGGAGTGC	AGAGCATGGA	GTGCTCAAAG	180

AGCTAGTTAG	CTCTGCAAAG	CTGAGTGTCA	GGAATGTAAA	GGGAGAGAAT	AGGAGTGAGA	240
GAAGAGTCTG	GCAAGGCAGA	CAGGGAAGGC	CTATATGCCT	TGATGGAGAA	CCACTGAAGG	300
ATTTAAAGAA	GGAGAGGGTT	AATTTTGTCC	AATAGAAAGA	TCACATTGTG	TGTAGTGTGG	360
AGGATGGGTT	GCAGAGAGAG	AAGCTAGAGA	CCAAAAGATG	AGACGGGAAC	AGCTGCAAAT	420
TTCGAGAGCT	CGTAAGATTA	TGTATGGCTG	GACCACTCGA	G		461

(2) INFORMATION FOR SEQ ID NO:662:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 502 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:662:

GAATTCGGCC	TTCATGGCCT	AGCCTGAGCT	CAGGAGTTCA	AGACCAGCCT	GGGCAACACA	60
GTGAAACTCC	ATCTCTACTA	AAATACATAA	AAATTAGCTG	GGCCTGGAGG	CATGCACCTG	120
TGGTCCCAGT	GCTACTGGGG	AGGCTGAGGC	AGGAGAATTG	CTTGGGCCCC	GGAGGCAGAG	180
GTTGCAGTGA	GCCAAGATCG	CGCCACTGCA	CTCCAGCCTG	GGCAACAGAG	CGAGACTCCA	240
TCTCAAACAA	ACAAACAAAC	AAACAAACAA	ACAAAACAAC	AGTTATTTTT	TTCTCACCAT	300
TCTAAAGAAT	GTTACATTTG	ATTCTTTTTT	AAAATTTGGT	CAGTTTGGAT	AGTCTTATTT	360
CTCCATACTT	TCATTCCCCC	TTTTTATTTT	TGTAAATAAT	TGAACTTTAT	ATTCCTTATA	420
TGATAATTTT	AATATCCAAA	GTCATTGGTC	ATATTCTCCA	GTTTCATGAT	TCTGCTGAGT	480
TTGTGGTGCT	GATTTTCTCG	AG				502

(2) INFORMATION FOR SEQ ID NO:663:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 485 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:663:

GAATTCGGCC	TTCATGGCCT	ACAACCACCA	ACATTTGTGT	TTTTGCAGAT	GAACAGGTTG	60
ACAGAAGTCC	CACTGGCTCA	GGAGTGACAG	CCCGAATTGC	CTTACAGTAT	CACAAAGGGC	120
TTCTGGAAGT	GAACCAGATG	AGAGCCTTCA	AAAGCAGTGC	AACTGGCTCA	GTATTCACAG	180
GGAAAGCTGT	GAGGGTAAGT	GGCACCCCTA	GCTTCTTATT	TATAAATGTG	TCATCATGA	240
GACTGGAGAG	GCCTGAGTTG	GGTGTTTGAT	AAATTTCTTC	ACTCAGCTCT	CAGAAGAGAA	300
TTTTAAAGCA	GGCCTGTAAA	AACTTCTTTT	CAACTAGGAC	ATTGGTTATC	CAGTGTGGTC	360
TTGGGGCCCC	AGCGGGCCCC	TAAGGTCCTT	TCCATGGGTT	CAGAGGGTCA	AAACTGTGTT	420
CATAATAATG	ACATTATTTG	CTTTTCACTC	TCATTCTCTC	AAGAGTGTAC	AGTGGGTTAC	480
TCGAG						485

(2) INFORMATION FOR SEQ ID NO:664:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 348 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:664:

GAATTCGGCC	TTCATGGCCT	AAAAATTATA	AAGTGTAATA	TATCTTTGTA	TCTCTAGTTT	60
TTCTCCTTTC	CCCAGATAAG	AATAAAAGCA	GGCTGCAGGC	TCCTGGGGTG	ATAACCCACT	120
TGGGTCGAGT	TCCATCGCTG	TTGGCGATAA	ATCTTGTTGG	TGTTCACTTT	TTGGGTTCTC	180
ACTACCTTTA	TGAGCTATAA	CACTCACCCCT	GAAGGTCTGC	AGCTTCACTC	CTGAAGCCAG	240
CGAGAGTACG	AACCCACAGG	CAGGAAGAAA	CTCTGAACAC	ATCCGAACAT	TGGAAAGAAC	300
AAACTGCAAA	CAAGCCGCTT	TTAAGAAGTG	TAACACTCAC	AACTCGAG		348

(2) INFORMATION FOR SEQ ID NO:665:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 571 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:665:

GAATTCGGCC	TTCATGGCCT	AGTCGTTATC	AGAGGTGGAG	ACATTTAGAA	GTTGTTCTTA	60
ATCAGAGTGA	AGCTTGTGCT	TCGGAAAGTC	AACCTCACTC	CTCAGCACTC	ACAGCACCTA	120
GCTCTCCAGG	TTCTTCATGG	ATGAAGAAGG	ACCAGCCAC	ATTTACCCTC	CGACAAGTTG	180
GCATAATATG	TGAGCGCCTC	TTAAAAGACT	ATGAAGATAA	AATTCGGGAG	GAGTATGAGC	240
AAATCCTCAA	TACCAAACCTA	GCAGAACAAT	ATGAATCTTT	TGTGAAATTC	ACACATGATC	300
AGATTATGCG	ACGGTATGGG	ACAAGGCCAA	CAAGCTATGT	GTCATGAAGC	TTTGTCACAT	360
ATCTGGGTAC	CAGGTTTGAC	CTCAAGAGAT	GGCTGCTGTA	CACTTTTTGC	AACTGGTTTG	420
ATGTCACATT	TCAGCTCCAA	CTTTGCATCC	TGAGAACACT	TAAACGTTTC	TGCAGGTCCA	480
TTTTATACAA	CTTGAAAGAC	CGTAAAACCT	TCTGGTTGCC	ACAAGCATAT	CTTCTTTTTC	540
TGCTCATCCA	ATAAACAGCT	GAGCCCTCGA	G			571

(2) INFORMATION FOR SEQ ID NO:666:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 444 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:666:

GGGATCATT	TTATTCAGCT	ACTGAGAACT	AGAATATTAA	GAGACTGCTG	GCAAGGCAAG	60
CAGTTAATTT	TCAGTTGAAA	TTGCATTAAA	TAAAAAGTAT	TTTCTTGCTT	TGTGGAAGCA	120
CGTGAATTTT	TGTAATAAGC	TGCTTGTTTT	CCCCATTTAC	AGGTTCTGTA	CAGAGTAATG	180
AGATGTGTGA	CGGCTGCAAA	CCAGGTGTTT	TTTTCTGAGG	CTGTGTTGAC	AGCTGCTAAT	240
GAGTGTGTG	GTGTTTTGCT	CGGCAGCTTG	AATCCTAGCA	TGACTATACA	TTGTGACATG	300
GTCATTACAT	ATGGATTAGA	CCAAGTGGAG	AATTGCCAGA	CTTGTGGTAC	CAATTATATC	360
ATCTCAGTCT	TGAATTTACT	CACGCTGGTA	TGTGAATTAT	TCTTTTCCTT	TTTAATGTGT	420
TGGTTTATTC	AGGCCCATCT	CGAG				444

(2) INFORMATION FOR SEQ ID NO:667:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 524 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double

(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:667:

```

GGGAACTGAC AAGCAATTAA CTGGAGAATA AGTGAGGGGA ATGGAGCAGT AGTATTCTTT      60
AACTTAATTT GCCATTTAAG AGAGCACTTG GAATCTGAAG AAAGTCTATC CCTACCAAGG      120
AAACGGAGTC AAATTGCAAT TAAGATTAACT TTTGGTTATA TGGAAAGCAAG AATCATGCTT      180
CTCATCATCA ATTGCGTCTC TTTGGTAGCC AATAATTCCA TCTGTAATCA TGGCAGCAAC      240
TTAAGTATTG CCAATGTTTT CAAATGTGTT ACAGCATTAA GGCATCCACA TCTAAAGAGG      300
CAGTTTTTAAA CAAGAGGAAA ACGGAACTGA AATGTGCCAA GAAGTGAACA CGGACATGGC      360
CTCTCCTGGA ATACTGCCCA CCATGCCAGC AAGCTCTTCC TCCAGTCAAG AAGGCCTGTG      420
CCACGCTGCT TGGTTCCCTG CTGCCTGAAG ATGCATTTGA GCCCTATGAG ATTAGTATGG      480
CTATTTCTGT CTGCTGACCA GGAGAGAAAT GACTAGTTCT CGAG                        524

```

(2) INFORMATION FOR SEQ ID NO:668:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 554 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:668:

```

GAATTCGGCC AAAGAGGCCT ACACAGAGGG ATAATTGGCA TTGGTATCAA CTGACATATT      60
CACAACTTTG AATAAACTT TCCACATTTG GAAAATCACC ATGCCTGGCC CCTAGGCTAT      120
ACTTTGAAAA CCACTGCTTT AGTGTTTTAG AAATGTGTAC CCTCATACTA ATATTTACTA      180
CACCCCCCAC CTTGACAATA CATACAAAAG AGGAGTAACA GTTCCCATATA ACCTTTCTAA      240
ATTTGAGTCT TATTAAACCA GACTCATAGC CCTGTGTTGAC TTTCTTCTCT GATCTGTGCC      300
TTATCCCTAG GCGGGTGATC ATGCGGGTAT CTGCTAATTG GCAGATGTGA GTGGTTATAC      360
CTATTTACAA GCAACTCATT GCAAAAATAA TTTAGCTAA AGAAAACATC CATGGCCAGA      420
GAATAAGTTT TGGAAATTTGA TATGTTAAAT GAGCTTTATG TTTACCTTTA AAAGGTTAAA      480
ATATTTACCA TTCATGGATT ACCTTTTTTC AGAAAGTAAG AATATATAAA TTACATTTAA      540
TCTTGAAGCT CGAG                        554

```

(2) INFORMATION FOR SEQ ID NO:669:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 329 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:669:

```

GAATTCGGCC TTCATGGCCT AATCGTATTC CATCTACTGC ATACTTTTCA TAGATGTCCT      60
CCATCAGAAG CACCTATGGT TGTTTGTTAA ACGTGTATT TCCTGATCCC ACCCCAGGAT      120
TTCTGAGTAT TCTAAGAATT TCTAAGTGTA AGGCCTGGAA ATATGCATTT TACAACCCCC      180
TAGAACATTC TTATGTGCAC TAAAATTTGA GAACCACTAA TCTGGTGTAT ATACTGTTGT      240
TACTTAATAT TTTCTTAATG ATAGATACTT GGATGATTTT TGACTTTATT ATTATTATAA      300
GCAATGTTGT AAACATCACA CAGGCCAAG                        329

```

(2) INFORMATION FOR SEQ ID NO:670:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 267 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:670:

```

GGCGTATGAT ACCTAAAGTG GAGTGGTCCG CGTTCCTGGA GCGGCCGAT AACTTGCCTC      60
TGATCCAGGT GCCGAAAGGG CCGGTTGAGG GATATGAGGA GAATGAGGAG TTTCTGAGGA      120
CCATGCACCA CCTGCTGCTG GAGGTGGAAG TGATAGAGGG CACCCTGCAG TGCCCGGAAT      180
CTGGACGTAT GTTCCCATC AGCCGCGGGA TCCCAACAT GCTGCTGAGT GAAGAGGAAA      240
CTGAGAGTTG ATTGCACCAG ACTCGAG                                         267

```

(2) INFORMATION FOR SEQ ID NO:671:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 429 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:671:

```

GAATTCGGCC TTCATGCCTT ATTATCTCTC AAAAACAAG CAATAAGTAC CAAGAAATAG      60
CAACAAAAAT TAGCTTGTA GGTGGTTTC TGAGGGTAGA AATGGCTCTT GATGCCATGT      120
GGAGCAATGG GAAGGAGGCT TTCTAGTTAC ACAGACTCTT GGTCTGCCA CTTATTCATT      180
TTATTTTATT TTATATTTA CTTTAAATTT TTTGAGATAG GGTTCACCC TGTCGCCAG      240
GCTGGTGGGC AGTGGCTCAC TGCAGCCTCG AACTACCAGG CTGAAGTGAT GCTCTTACCT      300
CAGCCTTTCG AGTAGTTGGG ACAACAGGTG CACACCACCA TTCCTGGCTA ATTAACAAAA      360
TTTTTTGTG GGAACATGGC AAGACCTGT CTCTATTAAC AACACAGCA ACAGCAACAA      420
CAACTCGAG                                         429

```

(2) INFORMATION FOR SEQ ID NO:672:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 357 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:672:

```

GTAAATCGT TCTTGAGAGG AACGTCTCTG TGCGAAGAGA TAATGAGTTT AGCTCTGAGA      60
AGTGAGCTTG TAGTGGACAA AACAAAGAGG AAAAAAGAA GAGAACTGTC TGAGGAACAG      120
AAACAAGAAA TTAAAGATGC TTTTGAAC TAATGATACAG ACAAAGATGA AGCAATAGAT      180
TATCATGAAT TAAAGGTGGC AATGAGAGCC TTGGGGTTTG ATGTAAAAAA AGCTGATGTA      240
CTGAAGATTC TTAAAGATTA TGACAGAGAA GCCACAGGGA AAATCACCTT TGAAGATTTT      300
AATGAAGTTG TGACAGACTG GATATTGGAA AGAGATCCCC ATGAAGAAAT ACTCGAG      357

```

(2) INFORMATION FOR SEQ ID NO:673:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 292 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:673:

GGTAGATACT	GGTTTTTCGT	ATCCTGCTTC	TCTTAAGGGC	AGCTCTTTTT	AGCATACTCC	60
CATGCAGCAA	CAGAAATTG	TATCTTTTTT	TTCTTTTTTG	AGATGGAGTC	TCGCTCTATC	120
ACTAGGCTGG	AGTGCAGTGG	CACAATCTCG	GCTCACTGCA	ACCTCTGCCT	CCTGGTTCAA	180
GCGATTCTCC	TGCCCTAGCC	TCCTGAGTAC	CTGGGACTAC	AGGTGCGCGC	CACCACACCC	240
AGCTAATTTT	TATATTTTAA	GTAGAGACCG	GGTTTTACCA	TGTGGCCTCG	AG	292

(2) INFORMATION FOR SEQ ID NO:674:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 470 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:674:

GGATGGACAT	CAGCACTTTA	CGGCGCCAGC	TGAGACCCAC	AGGCCAGCTC	CGTGGAGGGC	60
TCAAGGGCTC	CAAGAGTGAG	GATTCGGAGC	TGCCCCGCA	GACGGCCTCC	GAGGCTCCCA	120
GTGAGGGGTC	TAGGAGAAGC	TCATCCGACC	TCATCACCTC	CCCAGCCACC	ACTCCCCCAT	180
GTCCCACCAA	GAAGGAATGG	GAAGGGCCAG	CCACCTCGTA	CATGACATGC	AGGCCTTACC	240
AGAAGGTCCA	GGACTCGGAG	ATCAGCTTCC	CCGCGGGCGT	GGAGGTGCAG	GTGCTGGAGA	300
AGCAGGAGAG	CGGTGGTG	TATGTGAGGT	TTGGGGAGCT	GGAGGGCTGG	GCCCCCTCCC	360
ACTATTTGGT	GCTGGATGAG	AACGAGCAAC	CTGACCCCTC	TGGCAAAGAG	CTGGACACAG	420
TGCCCCCAA	GGGCAGGCAG	AACGAAGGCA	AGTCAGACAT	CCAACCTCGAG		470

(2) INFORMATION FOR SEQ ID NO:675:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 637 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:675:

GAATTCGGCC	AAAGAGGCCT	AGTCGCTCTT	GCTGAAACCT	TCAATGCAGT	GAGCGCCCAT	60
CTCATTGGGA	CCTACAGGCT	GAAGTTCTTC	CTCTGATGGA	CATGACCCCC	GTGTTGTCTC	120
TAATAACCTC	ACTTTCACCTC	TGTTCCAGCC	ACACGGGGTT	TCTGTCTTTC	TCGGGTCATG	180
TCGGGCTTAT	GTGCCTCGGG	CCCTTTGCTC	ATGCTGTTCT	CTGCCTGGGA	TGCGCTTTAC	240
TGGGTGCCAG	GATGGTCAGT	GATTCCATTT	CTCTCAGAGT	CTATTCACAG	GTCCCTTCT	300
CGGTACAGCC	TTCTCTGGCT	CCACTGTCTA	AAATTTCAAC	AGCTGCCTCT	GCCCCCGAA	360
CTTCATATCC	CCCTTATCTG	CCTTTTTTCC	TTCAGCTCTT	ACTTCCATCA	AATACAGTAT	420
GTATTTTTAA	AAGTCTTATC	TTGTTACGG	TCATTTTCTT	CCACAGGTAA	TTTTGGTAAA	480
CTTTGTAAGA	TGATGATGT	TTAATACTGT	TTTGTTTAAAT	ACAGTACCCC	CAGTTTAGCA	540
CACAGCTTTT	GAATGAATGA	CCAGTTTFTA	TTCCCTCTG	AAGCGCTAAG	AGCTGCCGCT	600
GAGGTGGCAT	CTGTAGCNGC	TCCCGCTCCA	ACTCGAG			637

(2) INFORMATION FOR SEQ ID NO:676:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 513 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:676:

GAACACGTCA	TGAGGAAGGA	GCAGCGCAAG	GAGGAGAAGG	AGAAGCGGCG	CCTCGACCAG	60
CTGGAACGTA	AGAAGGAGAC	GCAGCGCCTA	CTGGAGGAGG	AGGACTCCAA	GCTCAAGGGC	120
GGCAAGGCGC	CGCGGGTGGC	CACGTCCAGC	AAGGTCACCC	GGGCCAGAT	CGAGGACACG	180
CTGCGCCGAG	ACCATCAGCT	CAGGGAGGCC	CCGGACACAG	CCGAGAAAGC	CAAGAGCCAT	240
CTGGAGGTGC	CGCTGGAGGA	GAACGTGAAC	CGCCGCGTGC	TGGAGGAGGG	CAGCGTGGAG	300
GCGCGCACCA	TCGAGGACGC	CATTGCAGTG	CTCAGCGTGG	CGGAGGAGGC	GGCCGACCGG	360
CACCCAGAAA	GACGCATGCG	GGCAGCCTTC	ACAGCCTTTG	AGGAAGCCCA	GCTGCCGCGG	420
CTCAAACAAG	AGAACCCCAA	CATGCGGCTG	TCGCAGCTGA	AACAGCTGCT	CAAGAAGGAG	480
TGCTCCGCT	CTCCTGACAA	CCCCAACTC	GAG			513

(2) INFORMATION FOR SEQ ID NO:677:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 376 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:677:

GTCCATCCTG	AGCTCCATGG	AGAAGCCACC	CAGCCTCGGT	GACCAGGAGA	CTCGGCGCAA	60
GGCCCGAGAA	CAGGCCGCCC	GCCTGAAGAA	ACTACAAGAG	CAAGAGAAAC	AACAGAAAGT	120
GGAGTTTCGT	AAAAGGATGG	AGAAGGAGGT	GTCAGATTTC	ATTCAAGACA	GTGGGCAGAT	180
CAAGAAAAAG	TTTCAGCCAA	TGAACAAGAT	CGAGAGGAGC	ATACTACATG	ATGTGGTGGG	240
AGTGGCTGGC	CTGACATCCT	TCTCCTTTGG	GGAAGATGAT	GACTGTGCGT	ATGTCATGAT	300
CTTCAAAAAG	GAGTTGCAC	CCTCAGATGA	AGAGCTAGAC	TCTTACCGTC	GTGGAGAGGA	360
ATGGGCCCCC	CTCGAG					376

(2) INFORMATION FOR SEQ ID NO:678:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 350 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:678:

GAATTCGGCC	TTCATGCCTA	GCAGGAGGTT	TTATTGTAAA	GAGGCCGATT	GTACAGAGCA	60
AAGATTGTTT	TGACACGGGG	GGCTGGGTGG	TGGGACCCAG	AGGCCAGAGC	TGGGTGAAGG	120
ATGAGGGGTG	GCATCGCCCC	ATCCAGGCAG	TGGGCAGGGC	AGGGAGGACT	AAACGGCTGC	180
CTCCAGTTC	CCTTCCCTGC	CCCTCATTAC	TGGGTAAGAG	GGAGCCAGGC	TATTTCCACG	240
GATCCAGGAG	AATATAGCAG	GAGACCCTCA	CCACCCACAC	CCATGCCCCA	AGGATACGGG	300

AGGTGCCCCA GTCTGGCTTT TGCAGTCGGC CAGCTCCCAG CCTCCTCGAG

350

(2) INFORMATION FOR SEQ ID NO:679:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 357 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:679:

GAATTCGGCC	TTCATGGCCT	AGTTCTCACC	GGGGAAAAAC	CCACTGTTAG	GATGGCATGA	60
ACATTTCTTT	AGATCGTGGT	CAGCTCCGAG	GAATGTGGCG	TCCAGGCTCT	TTGAGAGCCA	120
TGGGCTGCAC	CCGGCCGTAG	GCTAGTGTA	CTCGCATCCC	ATTGCAGTGC	CGTTTCTTGA	180
CTGTGTTGCT	GTCTCTTA	TTAACCGTGC	TGAGGCTCCA	CATAGCTCCT	GGACCTGTGT	240
CTAGTACATA	CTGAAGCGAT	GGTCAGAGTG	TGTAGAGTGA	AGTTGCTGTG	CCCACATTGT	300
TTGAACCTCGC	GTACCCCGTA	GATACATTGT	GCAACGTTCT	TCTGTTATTC	CCTCGAG	357

(2) INFORMATION FOR SEQ ID NO:680:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 250 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:680:

GGGGGTGGAA	GGCGTAGTGC	TTGAAATGCA	GGGATCTGGC	AGTCAGCAGA	AGGATCTGAG	60
ACCCAGTGTC	GAGGTAAATA	AAAAAACAAA	AAACCAAAAA	CCAATGCAGG	AATCCAGTGG	120
GTGGAGTGAG	GGGATCTGGG	ATCCAGTGAT	GGGGGCCCCA	GGATCCAGGC	ATTGTGGTTG	180
TCAGGATCCA	GTGGTGAGGT	TTGTTGACAT	CCAGAAATCCA	GCAGCTGAGC	TTGGAGATCC	240
AGGGCTCGAG						250

(2) INFORMATION FOR SEQ ID NO:681:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 406 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:681:

GGATTCCTAC	AAAAATTGAG	GCAGAAGATC	AAAATCGGAG	TGGTAGGCGG	ATCGGACTTT	60
GAGAAAGTGC	AGGAGCAACT	GGGAAATGAT	GAATATTCAA	AGTCATCTGG	GTGAGGCCCT	120
AATCCAAGAT	TTAATCAACT	ACTGTCCTGAG	CTACATTGCG	AAAATTAAAC	TCCCGAAGAA	180
GAGGGGTACT	TTTATGGAAT	TCCGAAATGG	GATGTTAAAC	GTGTCCCCTA	TTGGAAGAAG	240
CTGCAGCCAA	GAAGAACGCA	TTGAGTTCTA	CGAACTCGAT	AAAAAAGAAA	ATATAAGACA	300
AAAGTTTGTA	GCAGATCTAC	GGAAAGAGTT	TGCTGGAAAA	GGCCTCACGT	TTTCCATAGG	360
AGGCCAGATC	AGCTTTGATG	TCTTTCCTGA	TGGATGGAAA	CTCGAG		406

(2) INFORMATION FOR SEQ ID NO:682:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 316 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:682:

GAATTCGGCC	TTCATGGCCT	ACCCTTCTAG	GTGTCATCTC	CTTCCCTCCC	TTTCCCCCAA	60
GACTCCCTCT	GGGCCCAGCC	AGCAGGTGAA	GCCTGACTTA	GGGAAGGGGG	GATTTCAGG	120
GGAGGGGCC	TGGCCCCAC	TGACCCAGCA	TTGCTATCCA	CAGGAGGAGC	AGCCCCACA	180
ACATCGATCC	AAGAGGGGGG	GCTCAGTGGG	CGGCGTGTGC	TACCTGTGCA	TGGGCATGGT	240
CGTGCTGCTC	ATGGGCCTCG	TGTTGCCTC	TGTCTACATC	TACAGATACT	TCTTCCTTGC	300
GCAGCTGTCC	CTCGAG					316

(2) INFORMATION FOR SEQ ID NO:683:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 394 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:683:

GAATTCGGCC	TTCATGGCCT	AATTGAATTC	TAGACCTGCC	TCGGCCTCCC	AAAGTGCTGG	60
GATTACAGGT	GTGAGCTAGC	ACTCCAGCC	GACAGGTGCT	TCTTAAATGT	TTTCTTTGAG	120
CAGGAATTGG	TCCAGGAATT	GGTTCCTAAG	TTAGAAGGAA	AATTTGAGGG	GAAGAACTTG	180
TTTTTTCTCC	AATCAGTCTC	TGATTAAATA	GTTATTAGGA	AAAACCTCTT	GCTTATGTCT	240
TTGTATTGCA	CATTTTATA	TATGTATATA	TGTGTAAATA	GAGATATTTA	TATATTGACA	300
GACAAACACG	TGTATGCACA	TTTCACAATG	GAGGAAGAAG	GGATATGGTG	TGCACTGAGG	360
TAAAGTGAGC	AGGGATACAG	AAGAGAAACT	CGAG			394

(2) INFORMATION FOR SEQ ID NO:684:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 509 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:684:

GTCCTAACCT	TGGGTCCAAG	TTTCGTTATA	GTGGCAGGAC	ACAAGCGCAA	ACGAGAAGAG	60
CCAGTGCGTT	GATAGATCGC	CCAGCACCTT	ACTTTGAACG	CTCATCCAGC	AAACGTTATA	120
CCATGTCTCG	CAGCTTGGAT	GGAGCATCAG	TGAATGAAAA	CCATGAAATA	TACATGAAGG	180
ATTCTATGTC	TGCTGCAGAG	GTTGGTACTG	GCCAGTACGC	CACAACAAAA	GGCATCTCTC	240
AGACCAACTT	GATCACCCT	GTGACTCCGG	AGAAGAAGGC	TGAGGAGGAG	CGGGACGAGG	300
AAGAGGACAA	ACGGAGGAAG	GGGGAAGAAG	TCACGCCCAT	CTCGGCCATC	CGGCACGAGG	360
GAAAGACTGA	CAGTGAGCGC	ACGGACACCG	CAGCCGACGG	GGAGACCACC	GCCACTGAGT	420
CGGACCAGGA	GGAAGATGCA	GAGCTCAAGG	CACAGGAGCT	AGAAAAAACT	CAAGATGACC	480

TGATGAAACA TCAAACCAAC ATTCTCGAG

509

(2) INFORMATION FOR SEQ ID NO:685:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 441 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:685:

```

GAATTCGGCC TTCATGGCCT ACCAAAGTGC TAGGATTACA GCGGTGAGCC ACTGCGCCTG      60
GCCTCTTTCT TCTTTCTTGA ATTCTCTTCT TTTTATGTTC CTGGGAAAAT CCTACTCATT      120
TTATATGATT TGGCTGATGT AAAGCCACCA TTGTCTTCCT AAGCAGAGAG GGTCTTGCTT      180
TTGGGTGCTG CACAACCTTG TGCAATTTT CTGTTACATC ATTTATCTTT TGGGGATTGT      240
TTATTTTCAT ACTTATCTCT CTTCAGGAC CATGTTAGGG AGAGGTGTTT TTAATTTTAA      300
CCTTTTCTGC AGCACTTAGC ACAGTGCCTA ATCATAGTAA ATATCACGTA AAAGTTGAAT      360
GAAGGAATGG ATGTTTGATA TAGAGTTAGG ACACCTGTGT CCAGGTCTGG CTTTGCTTTT      420
CCTTTNACCC CCCACCTCGA G                                     441

```

(2) INFORMATION FOR SEQ ID NO:686:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 273 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:686:

```

GAATTCGGCC TTCATGGCCT AGTTGGTTTA TGTATGTAA AGTTATGTAG TTATGTAAAG      60
GTGCTGAAAT GTCACCTCTG TGATTATGTT TTATTATATA AGGCTCTATC TTAGCAAACC      120
AGGAGAGAAA TTCTCCTGAT GGCCTTGAAG AAGCAAACAG CCACCTGGTT AAGCCCCTGT      180
GGATAGTGCC AAGTGGCAGG AAAGTGGGAG CCACCTCTAG GACCTGAGGA TTAAAGTCAG      240
TAAGAGCTGG GACCTCACTC ATGCAGACTC GAG                                     273

```

(2) INFORMATION FOR SEQ ID NO:687:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 124 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:687:

```

GAATTCGGCC AAAGAGGCCT AGGGCTCTGG ATTTTGACTT TCGGGCTCTA GATGGAATTG      60
AGAAGGTCCA ACTTGCTCAG AGGGCCCTGG AGGCTCATCT GACTTCACCC GGATTTTCCT      120
CGAG                                     124

```

(2) INFORMATION FOR SEQ ID NO:688:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 426 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:688:

```

GAATTCGGCC AAAGAGGCCT ATGCCATCTT AGTCCCTCTT CCCAACCCCA TTTTITAGTT      60
ACTTTCCTTT CATTAAAATA TCCTTATGCA CTTACAAATA AACTAAGTC CCAAGAGGGC      120
AACAAAATAT AAGATTCTTA ATGATACAAA AACAAATCTT TCTGATACTA GATCTTTTAT      180
ACTAGAAAAA TAAATTCTTG TGCTTGAACA TCATTTTAA GCACTTAGTG AATTGAGAAT      240
CTGAAGTCCC ACTTGAAATA TTCCCGGAA AGAAACATTA TGAACCAAAT GAAGGAACAT      300
AGCTATTCAA AGGGACATAT TTTTGTACTT GTTTTGCTCC AATTTCTGCT ACATAGACTG      360
CTCCAGTCTT TCTGTCGACT CTAGGAGATG CCTAAACCGT CGATTGAATT CTAGACCTGC      420
CTCGAG                                         426

```

(2) INFORMATION FOR SEQ ID NO:689:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 205 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:689:

```

GAATTCGGCC AAAGAGGCCT ATAGTTTTTT CATGTTACAT CTTTITAGATT ATTTTCTTTT      60
TAATCTATCT GTGACTATAT TTAAAGTCAA TTCTTGTTTT TTCCTTTTCC TTTTITGTTG      120
TAACGGGGTC TCGCTGTGTT GCCCAGGCAG ATCTCAAACCT CCTGGGCTCA AGCTGTCTCT      180
CCACCTCTGC CACCCTAGGC TCGAG                                         205

```

(2) INFORMATION FOR SEQ ID NO:690:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 100 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:690:

```

GAATTCGGCC AAAGAGGCCT ACGTTGATTG AGCACTGAGC CCTTACTACG TGCTAGGCAT      60
GGTACATGCA TGGCCTTATT TAATCCTATC AACCTCTGAG                                         100

```

(2) INFORMATION FOR SEQ ID NO:691:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 302 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:691:

GAATTCGGCC	AAAGAGGCCT	ACATCATACA	AGTCGTCGTA	AAGCAAATCT	GAGCTGTTGT	60
CATTGGAAGG	CACTTTAGTT	TTGATGCAGT	ATTCCGCCAG	GGTTGTGGGG	ACCTTCACTC	120
CATCCTTTTC	TGCTTCGGCC	TTAGTGGCTG	AAACTTGTTT	CCTAATAATT	TCAGCATATT	180
CTTTGTCTTT	TCCTTTACTG	TCTCTCCATT	TCCTGAACAT	AACTGAAGCA	TCGACATTGG	240
CTGGGGAGAA	GGTGTGGGC	TCATTAAGCA	GTGAGATTAC	ACTTAATAGG	ATAGTCCTCG	300
AG						302

(2) INFORMATION FOR SEQ ID NO:692:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 662 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:692:

GAATTCGGCC	AAAGAGGCCT	ACCAAATACC	AGGCTACCAT	GGTCTACAAG	ACTCTCTTCG	60
CTCTTTGCAT	CTTAACTGCA	GGATGGAGGG	TACAGAGTCT	GCCTACATCA	GTCCTTTTGT	120
CTGTTTCTCT	TCCGACAAAC	ATTGTACCAC	CGACCACCAT	CTGGACTAGC	TCTCCACAAA	180
ACACTGATGC	AGACACTGCC	TCCCCATCCA	ACGGCACTCA	CAACAACCTG	GTGCTCCCAG	240
TTACAGCATC	AGCCCCAACA	TCTCTGCTTC	CTAAGAACAT	TTCCATAGAG	TCCAGAGAAG	300
AGGAGATCAC	CAGCCCAGGT	TCGAATTGGG	AAGGCACAAA	CACAGACCCC	TCACCTTCTG	360
GGTTCTCGTC	AACAAGCGGT	GGAGTCCACT	TAACAACCAC	GTTGGAGGAA	CACAGCTCGG	420
GCACTCCTGA	AGCAGGCGTG	GCAGCTACAC	TGTCGCAGTC	CGCTGCTGAG	CCTCCCACAC	480
TCATCTCCCC	TCAAGCTCCA	GCCTCATCAC	CCTCATCCCT	ATCAACCTCA	CCACCTGAGG	540
TCTTTTCTGC	CTCCGTTACT	ACCAACCATA	GCTCCACTGT	GACCAGCACC	CAACCCACTG	600
GAGCTCCAAC	TGCACCAGAG	TCCCCGACAG	AGGAGTCCAG	CTCTGACCAC	ACGACCCCTCG	660
AG						662

(2) INFORMATION FOR SEQ ID NO:693:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 321 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:693:

GAATTCGGCC	AAAGAGGCCT	AAGCCCCCAA	AACACGCTCT	TTTGTGCCTC	CCCTCAAATC	60
CTTCACAGTG	TTCTTCCATA	TCCACTCCTT	CCAGGAAGCA	TGTTCTCACT	ACCCCAGTTC	120
ATGTGGGTTT	CTTCCCTCTC	AGAATTTCTA	TCATGCCCTT	ATAAGTTTAG	CAAATTGTCC	180
TTCTCTAATT	GTTTCACATC	TGTCCATCCG	ATATCCCAGG	AGGACTGTCA	GCTCTATGAA	240
GGCAGGGGTT	GTCTTTCCTT	TACCATGCCT	ACCATGCCTT	ATAGTGTTAA	TAAATTAACC	300
TACCCAGAAA	TGTTTCTCGA	G				321

(2) INFORMATION FOR SEQ ID NO:694:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 357 base pairs

(B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:694:

GCGATTGAAT TCTAGACCTG CCTCAATCCC CTCCCTACTT GCTTTTTTCTT AGCATATAAA	60
AGTCCACAAG TTTTACTCAT CTTTTTAAAA AACGAAAACA TCCTTAGACC GTGTCCTCCA	120
TTAGTTGCTA TCCTGCCTTC TTCTCTCAGC TGAGCTGTCT GAAACATGCT AACATGCTTA	180
TACAATACTT GCTGTCCTGC CTTCTGCTCT CAGCTGAGCT CTCTGAAACA TGCTAACATG	240
CTTATACAAT ACTTGCTGTC CTGCCTTCTC CTCTCAGCTG AGCTCTCTGG AACATGCTTT	300
TTATACAATA CTTGCTGTCC TGCCTTCTTC TCTCAGCTGA GCTCTCTGGA ACTCGAG	357

(2) INFORMATION FOR SEQ ID NO:695:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 225 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:695:

GAATTCGGCC AAAGAGGCCT ATGGGTTTTT AAAAATTTTG TTTTATTTT TTCCTTTGAT	60
GTGCAGAGGC TGTTTACTTT GATGCAGTCT CACTTGTTTA TATTTTATTT TGTTGCTGGC	120
CTAGGCCTCT TTGGCCGAAT TCGGCCAAAG AGGCCTAGTC GGGTGTGGCA GTGCCATTCT	180
GCAGTCCCAG CCACCGGGAA GACCGAAGCG GGAGGATCAC TCGAG	225

(2) INFORMATION FOR SEQ ID NO:696:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 314 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:696:

GAATTCGGCC AAAGAGGCCT ATCCGCTTCT GTTGCAGCTG GCGGTGCTCG GCGCGGCGCT	60
GGCGGCCGCA GCCCTCGTAC TGATTTCAT CGTTGCATTT ACAACTGCTA CAAAAATGCC	120
AGCACTCCAT CGACATGAAG AAGAGAAATT CTTCTTAAAT GCCAAAGGCC AGAAAGAAAC	180
TTTACCCAGC ATGGGACTCA CCTACCAAAC AACTTCTGT CGTTGTGCCT TCAAACAATG	240
AAGAAAAACG GTTGCCTGTG ATGATGGATG AAGCTCTGAG CTATGTAGAG AAGAGACAGA	300
AACGAGACCT CGAG	314

(2) INFORMATION FOR SEQ ID NO:697:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 353 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:697:

GAATTCGGCC	TTCATGGCCT	ACAGAGTGTG	GACGGCCAC	TGGGTTGGTG	GTGGTGGGTG	60
CCCGTCACAG	GGCTGGAGGT	GTGGCCGGCC	CACTGGGTTG	TGCTTTCTGC	CGTACGTCCC	120
TTCCCATGAG	GATGAGATGA	CCCATCTGTT	GCATCCCGGC	TGCTGATAAA	ACAAGACCCT	180
CGGAGCCAAG	AAACAACACT	GAGTTCCAGA	TTTCGGAAGG	TTCACGAGTG	TTGCCGACAC	240
GCCCTCCCAA	CTGCAGACAT	CCTCCCTGGA	GGACCTGCTG	TGCTCACATG	CCCCCTGTG	300
CAGCGAGGAC	GACACCTCCC	CGGGCTGTGC	AGCCCCCTCC	CAGGCCCCCTC	GAG	353

(2) INFORMATION FOR SEQ ID NO:698:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 449 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:698:

GAATTCGGCC	TTCATGGCCT	AGATTGACAG	AGGTCAGTTG	TCACTTCTTG	CCTCTCTCCC	60
CTTCAGCAA	CATGTATAAT	CCTGTGAGTG	TTTCTTCAGC	ACCCTTCTCT	GTGTTTACA	120
CTACTGCAAG	AGCCTCCCTA	AGTGGTCTGC	CTGTTTCCAC	CCTGTTGTCT	TGGAATTTAG	180
TTTCTCGCA	AAAGCCAGAG	AATGTTTCA	GAAGGTAGCT	CTTGAGCAAC	TTCCCACTTT	240
CTTGGAGGGG	AGATCCAGCT	TCCCCAACAA	GACCAGCAGG	CCCCTGTGCG	GCCTGGCTCC	300
TGTTACCCCT	ACCAGTCTTG	GCTCAGGCTC	ACGGCTGGAA	TATGCCGAGC	TCTTTCTTGT	360
CCTGGGGCCT	TTGCACTTGG	CTTCCCTCTG	TCCAAAATCA	TCTTCCTGTA	GCTTTGTGCT	420
TGCCTAGCTC	ATCATCATAG	CAGCTCGAG				449

(2) INFORMATION FOR SEQ ID NO:699:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 340 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:699:

GAATTCGGCC	TTCATGGCCT	ACAGAGAACT	GAGGAAAACC	AACTACGTGG	AGAATCTCAA	60
AGAAAAAAGC	GAGGGAGAAG	CTTCACTGTA	TGAAGATAGA	ATAATAACAA	GAGAGAAGGA	120
CATGAGGAGA	GTGAGAGATG	AGCCCGAGAA	GGTGGTGAAG	CAGTGGGACC	ATAGTGAGGA	180
TGAGAAAGAG	ACAGATGAGG	ACGATGAGGC	TTTTGGGGAA	GCTCTGCAGA	GCCCAGCAAG	240
CGGAAAGCAG	AGTGTGGAAG	CAGGAAAAGC	CAGAAGCGAT	TTGGGAGCAG	TTGCCAAGGG	300
CCTGTCAGGA	GAATTAGGCA	CAAGATCAAG	AGGGCTCGAG			340

(2) INFORMATION FOR SEQ ID NO:700:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 380 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:700:

GAATTCGGCC	TTCATGGCCT	AAGCCAAGCA	AGGCTGTACC	TTTAATTACT	GCTGCCCTCA	60
TTTGCACTCG	GCTGCCCTCA	TTATAGTGCT	ATTAGCAGAG	TGCAGGGGTC	CTCCTGCTGG	120
CCCATCGGGA	GTGGTGCGTG	CACAGTTGTG	GGGCCTTGCT	TTGGTGGTCT	TTGCTGCCTT	180
CTGGGCAAAA	TGAAGGATT	GGAGTAGACA	GCAAGCAGGC	ATACATCCTG	GGCCAGAAGC	240
AGCCTGCGGA	GCTCATCGTG	GCTTGCCTTA	AATTGTTTCT	CAACAATAAA	GTTGTTGAAA	300
AACAATTTGT	GTTTTCTTTC	TCCTTATTAA	AAACCCAAAA	TTATATTCAT	TATAGAAAAT	360
TAAAGAAGAT	AGCTCTCGAG					380

(2) INFORMATION FOR SEQ ID NO:701:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 319 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:701:

GAATTCGGCC	TTCATGGCCT	AATTGAATTC	TAGACCTGCC	TCAGCCTCCC	AAAGTGCTGG	60
GATTATAGGC	GTGAGCCACC	GCGCCCAGCC	GAAAATCTAA	AGATATTGAA	AAGATACAAA	120
GGAGCACATT	ATGAACATTT	TTTTCGTATC	ACTGAGTATT	TTATAACTGC	ATCATTGATT	180
TTAAAAGAAT	TCATGACTTT	GAAAACTAAT	ATTCTACAAA	GTAGCTTTTG	ATTTAACATG	240
AGATTTTATA	TATGTGCTTA	TCTTGGTTCT	CTATGAAACC	CCATTGAAAT	AAGAAAATGT	300
AAACACCAGC	CAACTCGAG					319

(2) INFORMATION FOR SEQ ID NO:702:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 549 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:702:

GAATTCGGCC	AAAGAGGCCT	AATAGTCAAG	ACCTTTGCAG	TTTTGATCAC	AGAAATATGA	60
AAGATTACAC	AGCTACAGCT	ATATGAATGA	TAAAAGTGAC	AGCTATGGAT	TTTTAAAGTT	120
ATAAGTTGCT	ATACTACATA	TATGTAATGT	GTGTGTGTAT	AGTGTGTAGG	TATATATATT	180
TATATTTATA	CACACACTAT	ACATGTATTT	TAAAATATTG	AAAATCCAGA	ATTATTTTAT	240
GGTAAAAATT	ACTAAAATTG	ACTTCACATG	CTGAATGAAG	AGAGCCTGAG	TAGACCAACA	300
AACAAATGAA	AAATTAAGAC	GGTTAGAAGA	TACGCTTTCT	AAAAGAATAC	ATTTAGAATC	360
TAACTTTAAA	AAAAAAAAT	CCTACTCTCC	TGAGCCAGAG	TGGTCTCAGA	GAGACTCCGA	420
GAACCTAATT	TTTTACAAGT	AAAATCTTTG	AAGAATTGGT	AATTGCTAAA	TTTTTCCAAC	480
ATACTATTCT	ACAAGACTAA	CCTAAAACCTG	ATTATAAGAA	CTAGGTGAGG	AGGGCCGGCA	540
AAACTCGAG						549

(2) INFORMATION FOR SEQ ID NO:703:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 758 base pairs
- (B) TYPE: nucleic acid

(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:703:

GAATTCGGCC	AAAGAGGCCT	ATCGAGCCAC	TGCACCTGGC	CGATGTGTTT	TGTTTGAAAT	60
CTTACTCAAA	AGTATTTGAA	GAGTTGTGTA	TAGTTGTATG	GATATGTCTG	TAGTAAACAG	120
AAACAAATG	CTTCAGTTTC	TCTTTACTTA	TTTTCTAGGT	TACAGTACCT	TTACCAGCAT	180
CCCAGCTTTC	CTTGCCTAAT	TTTGGATCTA	CAGGGCAACC	TCTAATTGCT	TTGCCTCAGA	240
CTCTTCAGCC	CCCATTACAG	CATACCACTC	CCCAAGCACA	GGCTCAGAGT	CTGAGTCGTC	300
CTGCACAAGT	AAGCCAGCCT	TTCAGAGGAT	TAATTCCTGC	TGGAACACAG	CATAGCATGA	360
TTGCAACCAC	CGGAAAAGTA	AGTAAAGAGA	CATTTGCACA	GGTTATTTGA	GAATTTAAGG	420
TAGTGTGTTT	AGATATATGC	ATCTGTGTTA	TCTAAAAAAC	TAAAATGCGT	CAGTTTTTAC	480
CACCCTGCAA	AAATCTCAA	CCCCAGTATA	TTTACATTTT	ATCTATTTAC	TTTAAATGTG	540
TTTGGCCCCA	TCTAGTTTTT	ACCTAATAAC	AAAGAATTCA	CAAATTTATT	GGAAGAATTG	600
GATTTATAGT	GTCTCTTCGG	CTTATTTAAT	TATAAGTCTG	TTTGGTCAGG	TAATTCATA	660
ATACTGAAG	CCTAACTATA	GGAGTTTTGT	ACTAAGGTTT	TTTGCCCTTT	CCTAGATTAC	720
GTCTTCACGT	ATAGGACATG	TAAACACAGC	AACTCGAG			758

(2) INFORMATION FOR SEQ ID NO:704:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 663 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:704:

GAATTCGGCC	AAAGAGGCCT	AAGATGGCCT	TCCCATGTTA	TGGCTACATG	GCTGTGATAA	60
CAAGTAGAGT	TATGTGTCTG	CGCTCTAAAC	TCACTGAGTC	TTGCAGGATG	TAAACATCCT	120
AGCTCAGCCT	ATCCTTGACC	AAAGCACANT	CATGCTCCTT	ACAAACTCCA	ACCAGCCTGC	180
ACACTGGGAG	GAGCGCGTGC	TGGGCTAGAG	CCACAGAATT	TTGTACCGTT	GGCAGCAGGG	240
AGGAGCCTGG	CCCCTCCTTT	CCTAGGTAGA	ATCTGGAATT	CAATCTGTGA	GGTGGGAAGC	300
ATATACTAGG	AGGACTTTCA	CTCTGCTGAG	TCCCTGTTCC	CCCTCCCTTT	TTTTTCCTTT	360
TTGCCCAATA	AACCCCTTTA	TTCTCACACT	TCAAATTGTC	TGTGAGACTA	ATCTTTTGTG	420
GCCATGTGAC	ATGGACCCTG	TCTGTAGCTG	AAACTAAGAA	AAAGCCCCTC	CCGCACAGTC	480
TGATGTTTCC	TCAGTCAGAC	ACTGCAAGCT	GTGATGTTGG	GGTGAGTACA	GGATATTTGG	540
CAATATTTGC	AGACAGTTTT	GGCTGTCAGA	GAGGAAGATG	CTGTATGCAG	ACACACTTGA	600
CAGCAATAAC	TTAAGCCAC	CCTGAGACTG	ACTCTGCATG	GTGATGCACC	TGAAGGCCTC	660
GAG						663

(2) INFORMATION FOR SEQ ID NO:705:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 334 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:705:

GAATTCGGCC	TTTCATGGCCT	AGAGCGATGT	CAAGTGATCT	GCCCCCCTCA	GCTCCCCAAA	60
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GTGGTGGAAAT TACAGGCGTA AGCCACTGCG CCTGGCCCCA AGTGTCCATT TTTTAATTTA      120
GTAATTCTAA CCTAGGTATT TTTCCTGCAG TACAAAATGA GGATAAAGCT TTACATGAAA      180
ACATGTTGTT CCTATTATGT TTATTGCAGC AAAAACACAA CCTAAAAACC CAATCTGAGC      240
AGGTTTTTAAC TAAATACTAA TAATTCTGAC ACTAGAACGT TATGTAGCTA ACAAAAATAT      300
GTCGTAAAAA TAATCATGTA GAAACTGGCT CGAG                                     334

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(2) INFORMATION FOR SEQ ID NO:706:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 369 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:706:

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GAATTCGGCC TTCATGGCCT ACCGAGCTTC AGAGCATCAG CAGTGTTCCT CCTTCACTGT      60
GACGCTTGTC CTCACCTCCC AGGTGAGGAG TCTAAGAAAA CAGCCTTTCC ATCAGCCCCCT      120
GTCGTGACAG ACCCTCCAGT GGGATGGTAG TGGCTGCCTC ACCCATTTAC AGGGCAACCC      180
AGTTTTGCTC CTTCTGCCTT GAAATTTGTT CCTCCCAGAA ACTGTCCCTC ACAAGGCATG      240
AACAAATCAAT AGAAGATATA CGTGGTCTTC CCAGCACTAC AGGTGCAGAA TGAGCTGTGG      300
AGTGCCCCGT CCGGAGTCCT GAACAGCTTC AAACCTTTCC CCTTTAGAAA TGCCTAACAC      360
GCCCTCGAG                                     369

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(2) INFORMATION FOR SEQ ID NO:707:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 365 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:707:

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GAATTCGGCC TTCATGGCCT AGGCATCCTT GGTGCGGCAT CCTTGGTGCA TTATATCAGG      60
AGGCAAATGA TGTGGGTTTG TCCATTGTTT TGTAATGGTA ACATTGGTTG CTGGGTTAAG      120
GTGAAGGGTG CCAAGCTTCT CCACTGTAA GTTCCTATTT TTTTCTCTGT AATTAATAAG      180
TAATTTGTAT GATACTTTGA GATAACAAAG TAGACTGTTC ATCAAACCTT CATCAATGAA      240
TTTAACATCC AAAGACGCCT CAAGAATGAT CATCAAAAGC AGCCTACTAA TGACTGTCAT      300
TTACCATTTA ATACATTTC AACTGTGCAC GTGCTCTGTG ACATATTCTG GGAAGGAATC      360
TCGAG                                     365

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(2) INFORMATION FOR SEQ ID NO:708:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 436 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:708:

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GAATTCGGCC TTCATGGCCT ACACAAAGCT TCTGGAGGAC AAACGGGAGC AGTTGAAGAA      60

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GAGCAAAGAG	CATGAGAAGC	TGATGGAGGG	AGAACTTGAA	GCTTTGCGGC	AGGAATTTAA	120
AAAGAAAGAC	AAGACGTTGA	AAGAGAATTC	CAGAAAGTTG	GAGGAAGAAA	ATGAGAATCT	180
CCGAGCAGAG	CTACAGTGT	GTTCTACACA	ACTGGAATCC	TCTCTCAACA	AATACAACAC	240
CAGCCAGCAA	GTCAATCCAAG	ACTTGAATAA	AGAGATAGCC	CTTCAGAAGG	AGTCCTTAAT	300
GAGCCTGCAG	GCCCAGCTGG	ACAAAGCTCT	GCAGAAGGAG	AAGCACTATC	TCCAGACTAC	360
CATCACCAAA	GAAGCCTATG	ATGCATTATC	CCGGAAGTCA	GCCGCCTGCC	AGGATGACCT	420
GACACAAGCC	CTCGAG					436

(2) INFORMATION FOR SEQ ID NO:709:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 383 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:709:

GCTGCTCTAT	ATCTTAGAGA	AAATAAAAGA	ACCACATGTT	GCTTCCCTGC	CTGCAAGCTC	60
TTCTGAATTC	ATCACCATTTC	ATGTTCTTTC	CTTCAGGGGA	AATGAAGGCA	GATTGTTCTG	120
TTGGTGCTCA	CAGATCTCTT	TCTGTTCTGA	TACCCTCCTC	TTCCTCTCCT	GCTTCTTTCC	180
CTTCATCATG	TGCTCCTATA	CAAGTCTCTC	CCAACTTTAA	AACAAAAACA	AACCCTTCCC	240
TAAATCTTGT	GTTTGTTCCA	GCCATTAGAC	TGTATCGTCC	TTGCCATCCA	CGTTATTGGA	300
AGAAGGCCAG	CTCACCTCTA	CTCCCTTTCT	GCCCTTTCCC	TCTTAATCTG	CTGTCCTCTG	360
ATTCTGCCC	CCACAACTC	GAG				383

(2) INFORMATION FOR SEQ ID NO:710:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 496 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:710:

GAATTCGGCC	TTCATGGCCT	AGGGGCCTGA	AGATCTTCGG	GTATTTGGCT	CCCAGAATCT	60
GACCACAGTG	AAGCTAAAAG	GGGTGGGTGA	CAGCTTCAAG	AAGTATCCTG	ACTACGAGTC	120
CAAGGGCATC	AAGGCTCACT	TCAACCTGGA	TGAGAGTGGC	GTGCTCAGTC	TAGACAGGGT	180
GGAGTCTGTA	TTTGAGACAC	TGGTAGAGGA	CAGCGCAGAA	GAGGAATCTA	CTCTCACCAA	240
ACTTGGCAAC	ACCATTTCCA	GCCTGTTTGG	AGGCGGTACC	ACACCAGATG	CCAAGGAGAA	300
TGGTACTGAT	ACTGTCCAGG	AGGAAGAGGA	GAGCCCTGCA	GAGGGGAGCA	AGGACGAGCC	360
TGGGGAGCAG	GTGGAGCTCA	AGGAGGAAGC	TGAGGCCCCA	GTGGAGGATG	GCTCTCAGCC	420
CCCACCCCTT	GAACCTAAGG	GAGATGCAAC	CCCTGAGGGA	GAAAAGGCCA	CAGAAAAAGA	480
AAATGGGGAA	CTCGAG					496

(2) INFORMATION FOR SEQ ID NO:711:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 475 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:711:

GAATTCGGCC	TTCATGGCCT	AGTATGGAAG	GTGGAAGTAA	AACTGAAATG	ATCAGTTCAC	60
ATATTTGTAA	ACTGCGTATT	TTATATCAGT	CGCTGGATTA	GGCCCCTAGA	GACAGTGGTG	120
GCTAAGTGAT	AAAGTCTTTG	CGCTTGTGGC	ATTTTATAGT	GTAGTGGGAA	GACAGAAAGC	180
AAACAAGTAG	AGAATCATAT	ATGTAATGTG	ACCTCAGGTC	CAGCTAAGCG	CCAGACAGAA	240
GAAAAAAGTA	AGGTGAAGGT	AGAGGGGTTG	GAGCAGGAGG	AAGGTGTTAT	TTTAGGTAAA	300
GTGGCCAGGG	AAGGCCTTTT	GAAGAATTGA	TATCGATTCC	AAAATGATGA	GAAGGTGCAA	360
TTGTGCCACC	ATGGAGGAGA	AGAGCTTTCT	AGGCAGAGGG	CAGGTGCAAA	GATGGTAGGA	420
ACAAACACGG	CTTGTGAAA	GAACAGCAAT	GTTTGAGGAA	TGAGCCACAC	TCGAG	475

(2) INFORMATION FOR SEQ ID NO:712:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 608 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:712:

GAATTCGGCC	TTCATGGCCT	AATTTTGCAT	AAAACCTCAT	CAATCTCTGC	CAATCACTGA	60
GCCCCAAACC	ATTTTCACTT	TGTTTTAGGT	ATTTATAATA	ACAGCACTCC	CACTTCTCAT	120
GATCAATTTT	CATCTTCAGC	GGTTCAGGCT	GCTTTAATAA	AGTTCCATAA	CCTGAGTGGC	180
TTTTAAATAA	CGGAATGCAC	ATCTCACAGT	TCTGGAGGCT	GGAAGTCCAA	CAGCAGAGTG	240
CCAGCATAAT	TGGGTCTCTG	TGAGAGAGCT	CTCTTGGGTT	TCAGACTGCT	GCCTTCTCAA	300
TGCAGCTTCA	CATGGTGGAC	AGAAAGAGCT	CTCAAGAGTC	ATTTTAAAGG	GCACCAATCT	360
AATTTATGAA	GCCTCCACCA	TAATAAGCTA	ATTACTTCCC	AAAGTGCTGA	GATTACAGCT	420
GTCAGCCACC	GTACCTGCCT	GGGAATTTTT	TTAAAGCTCA	AATTGGATAA	GAGGGTTATA	480
GGAATATATT	CATCTATCAT	ATAGAAAAGA	ATATGTGCTC	AGTCCAGGA	AATAGAAAAT	540
ATATTACCTT	ATTTATACTG	TTTTAATTAA	TGCTTTTAA	AATCTGATTA	ACTCTGGGAG	600
AGCTCGAG						608

(2) INFORMATION FOR SEQ ID NO:713:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 531 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:713:

GAATTCGGCC	TTCTTGGCCT	AGTGCACTCC	TGTAATCCCA	GCTACTCGGG	AGGCTGAGGC	60
AGGAGAATCA	CTTGAACCCA	GGAGGTGGAG	GTTGCAGTGA	CCCAAGATCA	TGCCACTGCA	120
CTCCAGCCTG	GGTGACAGAG	CGAGAACGTC	TTTAAAAAAA	TTAAAAAAA	AAAAAAAAGA	180
TTGCACAAAT	CAGACAGTGA	CCCAGAGCTC	AGCCTTGAGG	AAAGTCAGTG	TTGGGGAGGG	240
GAGGGCAAAG	AAGCAAGTAA	AGGTTTAGCA	GACATGGCAC	CTCAGTCTGG	ACTTGAAGGA	300
GGGCTAGGCA	CAAAGGAAGG	GGAACATGTC	AGATGAGAAA	CACGTGAAGG	TTCAGCCAGA	360
TGAGCAAGGA	AGGTTGGTTA	GAAAGAGGAG	CTGCTGGTGT	GGCTCCTGTG	AACACAGGTA	420
GATAGGGCAC	GATAGAGTCA	GGCAGTTAGA	AGCCAAGCTG	AGGAATCGAC	ACTTGATTCC	480
ATAGGTAAGT	AGGGGAACCT	GAGGATGTTT	AATCAGAAAT	GAGATCTCGA	G	531

(2) INFORMATION FOR SEQ ID NO:714:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 499 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:714:

GAATTCGGCC	TTCATGGCCT	AATTTATCCC	ATCCTTATCC	CATCCTTATA	AGGAATAATG	60
TATTGAATAA	AGATTGTATC	AGTATTTGTA	ATTCAATAAA	CCAGAACTTG	TGGAAATAAA	120
TATGTAGGAG	ACATAAATAT	GGTGTCTCA	AATTGAATTA	TGTGGGAAAA	AAGTGGGGTG	180
GAGTTAAAGT	CCAAGCCAAT	AAAGTTGTAA	CATTAAAGAA	AGACAGGTAT	GGGATGCAAG	240
GTGCAAAGAA	AAGGTCATCA	TATCTCATAC	TGGGGTGAGA	TAGAAGACTT	CCTGAAGTAG	300
GCGATGCCTA	TATTGAATCT	ATAAGGACAA	ACTGGCATCA	ATATGTCAGG	GAAGACAGGT	360
TGAAGGTGGT	CCTGCCAGAG	AAAGGAGCAA	GGATAAAGGC	AAGGAAGCAT	GTAACGTAAT	420
TGTTTGTGGA	GAAACCTCAA	ATCGGCTGAG	GAAAAACGAC	TCAGGTATGT	AGTAGGGCAC	480
AGTATAAGTA	GGTCTCGAG					499

(2) INFORMATION FOR SEQ ID NO:715:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 430 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:715:

GAATTCGGCT	TCATGGCCTA	GAGATTTAAT	GTTCCCTTAC	CTTGCTGGAG	GAACATCAAT	60
GTTGGAGGAA	ACAACCTTTC	TTTTTTGCTC	AAGGAGACAG	ATGGAGCGAG	TGTTTTCTTT	120
TTCATGGTCA	AGGATCCGGC	TGGCTTTTTT	GGTGTCTGCT	GTTTTACAT	CTTCCTCCAT	180
GGCCAAGGAA	AACACGTGTT	GATGAGACAT	TTTTTTACCA	CAGTCACGTT	TTAAGTCCTC	240
TGACTGAAAT	GTGAAGGTCA	TTTCCCGCTT	AATGCTCCCC	ACCTGTGAAA	TGAAACACAG	300
AAATTCTTAC	TCACATAAAA	CATCACCTTT	GTACGACTAC	TGCAGATGGC	GGTGAGGAGA	360
GATTACAGAC	ACTGTCCTTC	CTGTTTCATCT	GAAAGATTGT	ATAATTTTAA	TAAGAAAAAT	420
GCAACTCGAG						430

(2) INFORMATION FOR SEQ ID NO:716:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 471 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:716:

GAATTCGGCC	TTCATGGCCT	AGACCTTCTG	GGTGAACGAG	GGCAAGCACG	CCAAGTTCCG	60
CTGCTACGTG	ATGGGCAAGC	CCGAGCCCGA	GATCGAATGG	CACTGGGAGG	GCCGCCCGCT	120
GCTCCCGGAC	CGCCCGCGCC	TCATGTACCG	CGACCGCGAC	GGCGGCTTCG	TGCTCAAGGT	180
GCTCTACTGC	CAGGCCAAGG	ATCGTGGGCT	CTACGTCTGC	GCCGCGCGCA	ACTCGGCGGG	240
CCAGACGCTC	AGTGCCGTGC	AGCTGCACGT	GAAAGAGCCC	CGCCTCCGGT	TCACACGGCC	300
CCTGCAGGAC	GTGGAGGGCC	GTGAGCACCG	GATTGCCGTG	CTGGAATGTA	AAGTACCCAA	360

CTCCCGCATC CCCACGGCCT GGTTCCTGA GGACCAGCGG CTGCTGCCCT GCCGCAAGTA 420
CGAGCAGATC GAAGAGGGCA CTGTCCGGCG CCTCATCATC ACAGGCTCGA G 471

(2) INFORMATION FOR SEQ ID NO:717:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 397 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:717:

GAATTCGGCC TTCATGGCCT AGCCACTCTT AGCAACACAG ATTTTCTTCC AAATTATGCC 60
TTGAAGCTGC TCCCGGAGCC ACCCGCTCAT CAGCACCTTG CTCCTGTGGT CCTTCTCGTG 120
AAAGGCAGAG GGGAGATGCC TGTGCCCCG AGTCTTCTCT GCAGCTGCCG TGGGAACAGG 180
CACCTTCCCG GCTGTGGGG ACACAAGGAG GGGGAGTCAC CGTGGCTTGC TCACTTTCCA 240
GATCAGCCAA CTGCAGAACA TTTGTTGTTG TTTAGATCCC ACGTCTGACG GTTTAGAACA 300
GCTTTTATAA CATGGTTAAA CATGTTTACA AAGCAAGGGA GACATCTCTT ACCTTGACAA 360
CACGAGGCTC CCACAGACCG CCTTCCCCCA GCTCGAG 397

(2) INFORMATION FOR SEQ ID NO:718:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 539 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:718:

GAATTCGGCC TTCATGGCCT AGAAGGAAAG AAATTTTATG TGAGAGAGCA TCTGTATGG 60
CAAATCTTG TCCTAAAGTA GAATGACTAG GAAAGAGCAA AATATAGGAC AAGTCAGAAA 120
GTCATAAGAT GGGAAAGAAA AACTTACAAC TGCTAGATCT TCTCCTGTCT AGAAGTGTTG 180
TGTGTGTGAT GCTTATATGA AGGTACTCTA ATTAATTGGA TTAAGAGAAA ATGAAACCCC 240
ATCTCTACTA AAAATACAGA ATTAGCCGGG TGTAGTGACA CATGCCTGTA GTCGCAGCTA 300
CTCAGCAGGC TGAGACAGGA AGATAACTTT AACCCAGGAG TTGGAGGCTG CAGTGAGCCA 360
AGATCGCGCC ACTGCACTCT AGCCTGGGAG AGACAGAGCG AGACTCCGTC TCAAAAATGA 420
AAAAGTAGAG CCTGGTAGAG TGAAGCCACT TGCAGGAGTC GTTTAGTTAG GGCTGTGTTG 480
CCTTACAGTG CTGGTGTCTT CACAGATGAT AATAGTAATA AAAAACACCA CAACTCGAG 539

(2) INFORMATION FOR SEQ ID NO:719:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 387 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:719:

GAATTCGGCC TTCATGGCCT AGGCAGTGGA TAATTGTCCT CTGGAGGAAC CATCTGTGAC 60
ACATTCTACA TGGTTCCTTA GAGGGTCCCC AAGTGGGATT GAGTCCCTCT TGTTCCTAGC 120

AGTAAGCAGT TCTGTTATAC ACTCTTTATA TGCTTTTCCT CCTTTCCTCT CTCAGTCTCT	180
CTGATCCTTC CACCTGTGCT CTGGGTTTAC CTCTCAAGTA AACCACCTGC ACACAAGTCC	240
CTGTCTCAGG CTCCATTGG GGAAACCAAA CTAAGACACC ACCTCAAAAC ACAGAATTTT	300
ACGAGGCTCC AAATGCCTCA GAAAAGTAAT GTAAATATAA AATGACCAAT TTTTGAAGT	360
ATATTAATCC TAGTTATTTA ACTCGAG	387

(2) INFORMATION FOR SEQ ID NO:720:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 239 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:720:

CCCGTGATA GTTTGCAAAT ATTTTCTCCT CTTCTGTAGG CTGTTTACTC TTGTTGATAG	60
TTTCTTTTGC CATGCACAAG CTTTTTGGTT TAATTAGATC CCATTGTGCA ATTTTGTCTT	120
TTGTTGCAAT TGTTTTGGC GTCTTCATCA CGATATCTTT GCCAGTTCCT ATGTTCAAAA	180
TGGTATTACC TAGGTGCTT TCCAGAGTTT TTATAGTTT GGGTTTTTAT TTACTCGAG	239

(2) INFORMATION FOR SEQ ID NO:721:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 323 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:721:

CTCGAGCACT ACCCTAGACG GTCTCATCAC TATACTGGCT CTCCTTACC CCCGTAAATC	60
TCCCAGGTAC ACTTCCTGAT CACCCTCCGG ATACCTCATC CCTATCTATT CCTTTTATAA	120
ATAATTCCCT GCTCCTCCTT CTCACCCACA ATCCACTCGC AGTTCAAGGC CTCACTGCCA	180
TCGACTCCAC TGTCTGTGAG TGCTTCCCAA TATGCCCCAG GACCCCTCCT GGTGTCACGC	240
TCTGTATCCT GACACCCCTT GTAGACGAGT CCCGAAATTC CCGCCCCGTC CCTGGAGCTC	300
CCTAGGCCAT GAAGGCCGAA TTC	323

(2) INFORMATION FOR SEQ ID NO:722:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 275 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:722:

GAATTCGGCC TTCATGGCCT AGGCCTGTGG AGCCCCAGCT CTGGGTCCCT AGCCCGGGTC	60
CAGGCAGCCA GGCTCCCTCC TGAGCTGAGA AACGGAACCT CGCGAACCAC TGGTGGCACA	120
TCCTTCTCCT CCCCCGCCCC TGATCACCCG CCCCCGGATC AGAAATATAT CTATATTCTC	180
GACTAAAGTC TCATCAGGAA ATATTTCTTG TCTTTTATTT TAAGCATCAA ATTGTTTATG	240
TTGATTTAAA AAGGAAAAAA TACAGACGAC TCGAG	275

(2) INFORMATION FOR SEQ ID NO:723:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 317 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:723:

```

GAATTCGGCC TTCATGGCCT AAGAAGCAAC AATCATATTA GCTGGGGGAG GAGGATAGTT      60
TGGTATTTT GTAGTTTGCA CAGTGACCTT TTTAAAAATC TGGTTAGGCA AAAATAGTGT      120
GATCTTGTTT GTTGCTCTCAC TTCATTATGA TCACAGAATG ACCTGGTATG ATGTTAGTGT      180
TTTATGAGAG TGTATGTTT TAACAGGGGA ACACCGCAGT CAATTCCTAA CAACACTAAA      240
GTGTCAGTTC TGTTCGTGAC ACCAAGGGCT GTTTTCTTT TTCTCATATA ATGTTGAGGC      300
AACCAGGAAG ACTCGAG                                     317

```

(2) INFORMATION FOR SEQ ID NO:724:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 267 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:724:

```

GGCCTCAGCA GGTGTGAAGC GTGTGCTTTA GTTTCGTGGG AGGCCTGGCA TCCCCGAGAG      60
GGAGGGGAAA GGTAACCACT CCTTTGTGGA GGTCGCCAGG GTCATTGTCTG TGGATTGCA      120
CAGTCGGCTG GGCGGTGCAA TGGCGGAAAG AAAAGGAACA GCCAAAGTGG ACTTTTGTAA      180
GAAGATTGAG AAAGAAATCC AACAGAAATG GGATACTGAG AGAGTGTGTTG AGGTCAATGC      240
ATCTAATTTA GAGAAAGCAG ACTCGAG                                     267

```

(2) INFORMATION FOR SEQ ID NO:725:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 354 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:725:

```

GAATTCGGCC TTCATGGCCT AAGTCAGTGG TAAGCCGCAG CAGTTTCCTG CCACTCGTAA      60
TATGGCAATT AAAAATTTTA AATTGTGGC TGCTGGGGT CTGGGAGGTG ACCTGCTCCT      120
CAGCAAATTT TGA CTGATAA ATTAATGCCT GGGTCTTCAG CCTGGTTCTT TGCTGGCCAG      180
TGTGACAACA GTCTGTCACG TCTCTGGGGG CACATTATAA TTAACAGATG TAATCTTTCT      240
CCGGTTCAGG GTCATCTGTG AATCAGGGGT ACTGCCCCAG TAGAACTAGG AACATCCAGC      300
AAAAGACTGT TTTCAAATA TACAATTAAG TGAAAAAAGC ATGAAGAACT CGAG          354

```

(2) INFORMATION FOR SEQ ID NO:726:

- (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 154 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:726:

GAATTCGGCC	AAAGAGGCCT	AGAGGTTGAC	CTGAAAAACA	ATGAAACACA	TGAACACACT	60
TCCGATTTTC	TCCTCGCTGA	TTAGCTTCCT	GCCTGCTGTC	AGTGCTGGAC	GAAGTGCTAT	120
AACTACTTTA	TGTAACATTA	CAGAACAGCT	CGAG			154

(2) INFORMATION FOR SEQ ID NO:727:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 338 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:727:

GAATTCGGCC	TTCATGGCCT	AGTGGGAAGA	TGTGGATGAT	GAGAAGGGAG	ATAGCAATGA	60
TGACTATGAC	TCTGCAGGCC	TATTGTCAGA	TGAAGACTGT	ATGTCTGTGC	CCGGAAAAAC	120
TCACAGAGCT	ATAGCAGATC	ACTTGTTCTG	GAGTGAGGAA	ACAAAGAGTC	GCTTCACGGA	180
GTATTCGATG	ACTTCCTCAG	TCATGAGGAG	AAATGAACAG	CTGACCCTAC	ATGATGAGAG	240
GTTTGAGAAG	TTTATGAGC	AATATGATGA	TGATGAAATT	GGAGCTCTGG	ATAATGCAGA	300
ATTGGAAGGT	TCTATTCAAG	TAGACAGCAC	GACTCGAG			338

(2) INFORMATION FOR SEQ ID NO:728:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 433 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:728:

GAATTCGGCC	TTCATGGCCT	AATTGAATTC	TAGAACTCTC	CCAGAGAAAC	CAGGCAGATA	60
CTGCTCCACA	CCGGTGAGCT	GCTTCTCACC	TGGGTAGTCT	AGGGTGTTT	GCTCCAGAAT	120
TGTATTTCTG	CTTTTCTTT	TTTTAACTTG	GCAGTGGTTA	ACCATTCCTC	GGAGCAGCAC	180
CAGGTAAGTC	AGCTTGATC	AGAGTCATCT	GCTTTACCTG	ACATGAGCAC	ACGTGTGCAT	240
ATATTTGCAC	ATGCAGATAT	CATATGTTAA	ACAATATCAC	ATTGTTGAAG	AAAATTACAC	300
TGGAAAGCGT	AAAAATAGT	TTGGATGCCA	TATTGAGTGT	AACTTAATCC	ACCCGATTCA	360
GAACTTTTGT	AGAGTGCCTC	GGAGTTCCTA	TTTGAAATA	TCAGTTAGCA	GTTTTAGTCA	420
GTAGAGACTC	GAG					433

(2) INFORMATION FOR SEQ ID NO:729:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 315 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double

(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:729:

GAATTCGGCC	TTCATGGCCT	AACAAGAAAC	ACCAAGTACC	TCGACCTCAA	GAATTCACAA	60
GAGATGCTCC	GCTACAAAGA	GGTCTGCTAC	TACATGCTCT	TTGCCCTGGC	TGCCTACGGG	120
TGGCCCATGT	ACCTGATGCG	GAAGCCCGCC	TGCGGCCTCT	GCCAACTGGC	TCGGTCCTGC	180
TCGTGTTGCC	TGTGTCCTGC	GAGGCCGCGG	TTGCCCCCTG	GAGTCACCAT	CGAGGAAGAC	240
AACTGCTGTG	GCTGTAATGC	CATTGCCATC	CGGCGCCACT	TCCTGGACGA	GAACATGACT	300
GCGGTGGGAC	TCGAG					315

(2) INFORMATION FOR SEQ ID NO:730:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 156 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:730:

GAGTTGTCTC	TCTGAATTAA	CTTCTCACC	AATAGCTCCT	CTTTAAGATC	AATAACTCTT	60
ATGTTTGCAC	TTTTTAGGCT	ATTTTCTAGA	TCTTGTATGT	GTGTCTTATT	ATTTTTTATT	120
CTTTTGTCT	CCTCTGTGAA	TTTCAAATA	GTCGAG			156

(2) INFORMATION FOR SEQ ID NO:731:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 223 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:731:

GAATTCGGCC	TTCATGGCCT	ACTTGAACCT	AGATCTCACC	CCCAGGATGT	TGCGGAGGCT	60
GCTGGAGCGG	CCTTGACGCG	TGGCCCTGCT	TGTGGGCTCC	CAGCTGGCTG	TCATGATGTA	120
CCTGTCACTG	GGGGGCTTCC	GAAGTCTCAG	TGCCCTATTT	GGCCGAGATC	AGGGACCGAC	180
ATTTGACTAT	TCTCACCTC	GTGATGTCTA	CAGTAACCTC	GAG		223

(2) INFORMATION FOR SEQ ID NO:732:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 309 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:732:

```

GAATTCGGCC TTCATGGCCT AAATTATTGC AAAGTGTATA TTGGTTAAAA AAAAAAAGGA      60
GGAAGAGGCA GTTTTTCATG ACGGTTAAAA GTGCAGGATT TGGAGTCCCA TGGTCCTGGG      120
TGTGAATCCT GGCTGTGGCA CTAACATATCT GTGTGACTGG CTGTGAACCT CTCGTGCCTC      180
ACTTTCTTCA TCTGCAAAAT GGGTAGTTGT ATAGCAAATG CACATAGAGA ACACTTAACA      240
CTTTGGCACA TTGAAGCAC TCAGTAAATG TTAATTGTTA TTATTGTTGC TCTAAAGAGA      300
ATCCTCGAG                                     309

```

(2) INFORMATION FOR SEQ ID NO:733:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 275 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:733:

```

GAATTCGGCC TTCATGGCCT AGATTAATTC TAGACCTGCC TCAGCTCCAC TCCTTATGGT      60
TTGCCACCAT AACCTACAAC ATTTGTCCGT CCACCCCACG TGTCTTCTTC CTTTGTGGCA      120
GGAAGTCTTA TCTCTGCCTA CCAACCAATT GGTGAGGAGC ATGCACCCTA GTGTCTCAAT      180
CTCCAGACAT TAACATCCTG CCAAACAACC AGACCATCCA GGTTCCTTTA GTGACCCCTA      240
TCTCATCTC TTCCACATGC AGTAGGCAGG TCTAG                                     275

```

(2) INFORMATION FOR SEQ ID NO:734:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 250 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:734:

```

GCAGATCAGA GGCACGTTTC CCACAACGTC GAAGAGGCGC TGAGGCAATT CTGCAAGAAG      60
ATTTTGGGGT TTTGGAAAAG AAGCTATGGA AAACGGAGGG GCAGGCATCT TGCAGATAAG      120
GCAAGTCTCG CTTTCTTTTG TTTTGCTGGG AATGTCTCAG GCGGGCTCTG AAAGTGGGAA      180
CTTTTGGTG ATGGAGGAAT TGCAGAGCGG GAGCTTTGTA GGAAATTGGA CAAAGACCCCT      240
GGGACTCGAG                                     250

```

(2) INFORMATION FOR SEQ ID NO:735:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 324 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:735:

```

GAATTCGGCC TTCATGGCCT ACACAGACTG GGCAATTTAT AATGAACAGA AGTTTATTTG      60
GCTCTTGGGT CCAGAGGCTA GGAAGTCCAA GAGCATGGTG TCAAGCATCA GGTGAGGATC      120
ATCACCCCGT GGTAGAAGAT GGAAGGCAGA AGTGAGCGTG TGAGACAGAG AGGGAGAATT      180
GGACTCAACT CATCCTTTTA ATCAGGAACC CACTCTGTCA GTAACGAACC CATCCCCACA      240

```

ATAATGGCAT TAATCCATTC ATGAGGCCCC TACCTCTTTT TCTCCCCCG CCCCCGAGA 300
 TGGAGTTTTG CTCTTGAGCT CGAG 324

(2) INFORMATION FOR SEQ ID NO:736:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 259 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:736:

GAATTCGGCC TTCATGGCCT AAACACATAC CAGATTCTTA GATTCATTG GTGAAGGAAG 60
 CCTCTGAATT AAAACTTTTA AATATTCTG ATTGCAACC AGACGAAAAA GAAGAAAATT 120
 GACAACTTTT TTGATGCAAC TTTGTGAAAT CATGGTGTTT CTGGTTTTTC TGGTCTGGTT 180
 TTTGTTGTTG TTTTGTGTTG TTTTGCCACA GTTAGTTCC TCACCTGATC TTTCTTGTA 240
 TCCACTTCAG AGTCTCGAG 259

(2) INFORMATION FOR SEQ ID NO:737:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 409 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:737:

CTCGAGGCGG TGCCAGACAC GGGTCTCCTC CGACTGGGCG GTGCGTGGGA TGCCGCCAGC 60
 GTCCAGGTAC TGCGTGATGC GGATGTAGGC GATGCAGGCT GACTCGTCGC CCATCAGGTG 120
 GATGTGGGGA TTCAGGATGG TGGTGTGCAC GGGCTTGCTG TTCCGGGACC ACAGGTTTTC 180
 AAAATAGAAT CGATGGAAGT CCAGGCCCTC AACCAGGTTT CCCAGGGCCT CAGGTTCCAA 240
 GGCTGTCTATG CCAGGTCGCG ACATCTTCGT GTAGGACTCA AAATCTCCAT TGCTTATGGC 300
 TTCAATCAGC TGCTCTGTCA CTTTATAAT TTCTGTTTC CGCACTTTGG TGTCTTCATC 360
 CTCGATGGTG GTGTTGGTGC TCTCTGAGTA GGCCATGAAG GCCGAATTC 409

(2) INFORMATION FOR SEQ ID NO:738:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 466 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:738:

GAATTCGGCC TTCATGGCCT ACTTCCCCTT CCTTCCTTCC TTCCTTCCTC CCTCCCTCCT 60
 CTCTCCTCTC TTTCTTCCTT CCTTGCTTCC TTCCATCCTT CCCTCCCTCT CTCTCTTCTT 120
 TTCTTTCTTT CTCTCTCTCT CTCTTCTTTT CTTTCTCTCT CTCTGTCTTT CTTTCTCTCT 180
 TTCTTTCTTT CCATCTTCTT TTCTTCTAT CTTTCTTACT TTGATGTAG CTGTACAGAC 240
 CTAATGAAAA TACTGGCATG AGTGATGCCA CCTTTAGATT CTCCACCTTC CTGTTCCCTGT 300
 CCTATTCACC AACATGAATT GGTGTTGTGGC TGTAAGTACT TGGTGGGTTA TTGCTCATAG 360

ATTCAGTTGC ATTTTGTCTG AGATAGTGCT GTTACCAAAA GCAGGGGTGC TGCTTGAAGA 420
 AGTAAACCTA ACTCTGAAAA ATAGAGACTC TCCAGAAACA CTCGAG 466

(2) INFORMATION FOR SEQ ID NO:739:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 367 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:739:

GAATTCGGCC TTCATGGCCT ACATTCTGCA AACTATTTTG TTATTAGCTT TTCACTTAA 60
 AAATAGCCCT GCTTGCAAGC AGGCTCTGTG GTGCAATGGA TAGCGCATTG GACTTCTAGC 120
 CTAAATCAAG AGATTCAAAA ATAGCCCTGC TAAATATTTG CAATCTTTCC TACGCTCCTT 180
 TTTCCCCAA AGTGACTTTG GATATCCAGA GTTACCAAAT CTAGTATTTG AAGTCCTTAG 240
 GTTTGAGGGT TGAAAGTGAA AGGCAAGCTG TTTTAATGAA AATTCCTAAC TGAAGAGAGC 300
 GGAGACTTAA GATGCTTAAA TTTTGGTCAC ACCTGAGCGG TATTTGTTTG CATGGCAGGA 360
 GCTCGAG 367

(2) INFORMATION FOR SEQ ID NO:740:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 264 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:740:

GTGATGGACA AAGACAGGGA AGGCCTCATC AGCAGGGATG AGATCAGAGC CTACTTCATG 60
 AGAGCCAGCT CAATCTATTC CAAGCTGGGC CTGGGCTTTC CTCACAACTT CCAAGAGACC 120
 ACCTACCTGA AGCCCACTTT TTGTGACAAC TGTGCTGGAT TTCTCTGGGG AGTGATCAAA 180
 CAAGGATATC GATGTAAAGA CTGCGGGATG AACTGTCA CAACAATGCAA AGATCTGGTT 240
 GTGTTTGAGT GTAAGAAGCT CGAG 264

(2) INFORMATION FOR SEQ ID NO:741:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 318 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:741:

GAATTCGGCC TCATGGCCTA CACGACCAGC ACCGCCACTG CCACCTCACA GCCTTTCCTC 60
 TTCGGGGGCG CCCAGGCCTC TGCTGCCAGC TTCACCCCGG CCATGGGCTC CATATTCCAG 120
 TTTGGCAAAC CTCCTGCCTT GCCCACAACC ACCACAGTCA CCACCTTCAG CCAGTCCCTG 180
 CCCACTGCCG TGCCAACGGC CACCAGCAGC AGCGCTGCCG ACTTTAGTGG TTTTGGCAGC 240
 ACCCTCGCCA CCTCCGCCCC GGCCACCAGC AGCCAGCCCA TTCTGACGTT CAGTAACACG 300
 AGCACCCCCG GCCTCGAG 318

(2) INFORMATION FOR SEQ ID NO:742:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 256 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:742:

GAATTCGGCC TTCATGGCCT AAGAAATGAA AAAGATTATT GAAACTATGC CAATGACTGA	60
GAAAGTTGAA GAATTGCTGC GTGTCATAGG TCCATTTTAT GAAATTGTCG AGGACAAAAA	120
GAGTGGCAGG AGTTCTGATA TAACCTCAGT CCGACTGGAG AAAATCTCTA AATGTTTAGA	180
AGCTGAAAGC AGTGACAGTG GAGCCGAGTC TGAGGAAGAA GAGGCCCAAG AAGAAGTGAA	240
AGGAGCAGCC CTCGAG	256

(2) INFORMATION FOR SEQ ID NO:743:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 580 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:743:

GAATTCGGCC TTCATGGCCT ATGTTTTTAT AGCACCGATG GTACTGTTT ATTTATTGCC	60
AATAGACCAC AACATTCACA TCTGTTTTTC CTCAAGGGAA CCGTATTTCG TTTTGTTGA	120
AGGATTTATC TATTTGATAC TATCCAGAAT ATTGTGAAGC TATAATTTC TGGGTTATAT	180
TTTAGATGGG TTGTCTGCAT GGTGGTAAAA TAAGCTTTT CCTCTCGCCT ACGTCCTTTG	240
GAAGATCTCC TGATCATACA TAACTAGGTA GGGCTTATTC TTGCTGCCGG AGCTTGGCAC	300
CCAGCTCTAG ACTGTTTCTT TGAGCATTAC TGCAGATTGG AGACGTGTGT GAGAGGAGCA	360
GCGCTCAGAA ATAGGGCTTG AGGCTCAAGC AGAAACTGAA GCTCTCATTC AAATGAAGAT	420
GCTCTCTCTA CCGCACGATC GGCAGTGAGA AAAGGAGGAT GAAAATCCTT CTCATCACAA	480
AGAGCTTGAA GGAACCCACG TCCCCAGATT AGCAACCCTA GAGTTCATCT GCTCAGGCCG	540
GGAAATGTGT AAGCTTCCTT GATCAACTCC AGGCCTCGAG	580

(2) INFORMATION FOR SEQ ID NO:744:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 374 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:744:

GAATTCGGCC TTCATGGCCT ACCCAGAGAC TCGCGGACGC TCACGATAAC CAAGGACGAC	60
CGCGAACCAA GGGCAAATA ACATGGCAGC CAGACGAATT ACACAGGAGA CTTTGTATGC	120
TGTATTACAA GAAAAAGCCA AACGATATCA CATGGATGCC AGTGGTGAGG CTGTAAGCGA	180
AACTCTTCAG TTAAAGCTC AAGATCTCTT AAGGGCAGTC CCAAGATCCA GAGCAGAGAT	240
GTATGATGAC GTCCACAGCG ATGGCAGATA CTCCTCAGT GGATCTGTAG CTCACTCTAG	300
AGATGCCGGA AGAGAAGGCC TGAGAAGTGA CGTATTTCCA GGGCCTTCCT TCAGATCAAG	360

CAACCCCTCT CGAG

374

(2) INFORMATION FOR SEQ ID NO:745:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 323 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:745:

GAATTCGGCC AAAGAGGCCT ATTGGTTTCC CTGCTTCCAT TCTTACTCCC CTACACTCTG	60
TTCTCCAAAA AATAACCATT GTGATCCTTT AAAATCCTGA CTCTCTCCTG CTCAGAGTCA	120
TCCAGTGGCT TCCCATATCA CGTAAATGA AACCCCAATC GCTCCTTACT CTGGCCTGCA	180
GGGGCCTGTG TGATGGGCCT TCTCCAGCTT CGTTCTTCCT TTCCTTCTGT TCTCCCCTCT	240
GCTTACCTAC TCCATCTCCA GGGCTTCTTT CCAGCTCAAG CCCTTTCCTG TTGAGAGCAT	300
TTGCTTTCCT CAGGGCACTC GAG	323

(2) INFORMATION FOR SEQ ID NO:746:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 273 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:746:

GAGAACAGTG TTACCAAAGA AAAGGACATG TTCAATTTCA AACGAGCCCA GGAGGACATC	60
TCTAGACTTC GCAGGAAGCT GGAGACCACA AAGAAACCAG ACAATGTACC CAAGTGTGAT	120
GAGATTCTGA TGGAGAGAT TAAGGATTAC AAGGCACGCT TGACCTGTCC ATGCTGTAAC	180
ATCGTAAAA AGGATGCTGT TCTTACTAAG TGTTTTCATG TCTTCTGCTT TGAGTGTGTG	240
AAGACACGCT ATGACACCCC CCCC GCGCTC GAG	273

(2) INFORMATION FOR SEQ ID NO:747:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 666 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:747:

GAAGATCTTC GCTGTCCTCT CTGCCTCTAT CACACCAAAT ACAAGCGCAA CATGATTGAC	60
CACATCGTGC TGCACCGAGA AGAGCGTGTT GTCCCCATTG AAGTTTGCCG GTCCAAACTG	120
TCCAAATACT TGCAGGGAGT AGTTTTCCGC TGTGATAAGT GTACCTTCAC CTGCTCCAGT	180
GATGAGAGCC TCCAGCAACA TATAGAAAAG CACAATGAAC TGAAACCTTA CAAATGCCAG	240
CTCTGCTACT ATGAGACCAA GCACACGGAG GAACTGGACA GCCACCTTCG GGATGAGCAT	300
AAGGTAAGCC GTAACTTTGA GCTGGTTGGA CGGGTTAACT TGGATCAGCT GGAACAGATG	360
AAGGAGAAAA TGGAGAGCTC CAGCAGCGAT GATGAGGACA AGGAAGAAGA AATGAACAGC	420
AAGGCTGAAG ACAGAGAGCT GATGAGATTT TCTGACCACG GGGCTGCTCT TAACACTGAG	480

AAGCGTTTTTC CATGTGAATT TTGTGGACGG GCGTTTTTCAC AGGGCTCTGA GTGGGAAAGA 540
 CATGTGCTGA GACACGGCAT GGCATTGAAT GACACCAAGC AGGTGAGCAG AGAAGAAATC 600
 CACCCAAAAG AGATCATGGA GAACAGTGT AAAATGCCCT CCATAGAGGA AAAGGAAAGT 660
 CTCGAG 666

(2) INFORMATION FOR SEQ ID NO:748:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 379 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:748:

GAATTCGGCC AAAGAGGCCT AACAAACCGAA TATAGTACAC GACCTTCCTG CAGCAGTTCT 60
 AAGCTACTGT CAAGTATGGA AAATCCCGGC AATTCTGTAC TTGTGTTATA CTGATGTGAT 120
 GAAATTAGAC CTAATCACAG TGAAGCTTT TAAGCCTATA CTTTCTACCA GAAGCTTGAA 180
 GGGTTTGTT AAGAATATTC CCCAAAGCAC TGAGATACTA AAGAAATGA TGACAACNAA 240
 TGAGATTCAG AGTAACATTT ATACATGATC TTAAACATTG TTTTGTAGTG TATATTACTT 300
 GTCCATTCTT TTAAGGGGAG CAGCCTGCAC TCTTTTGTAG ATTACTTTTG GGGGATATAT 360
 TTTGAGAATG ATGAAACGG 379

(2) INFORMATION FOR SEQ ID NO:749:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 335 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:749:

GAATTCGGCC TTCATGGCCT AGGCGCAAGG CCGAGCGTTC CCAGCAGGGG GAGAAACCTT 60
 TCACACCCCA GGCCCTTCAG GAACTGGGGC CTTGCCTTGC AGCCACATGG CCCCATCCCA 120
 GTTGGGGAAG CCAGGTGAGC TCTGACCCTT GGGCCTGGGC CTCTGCCCCCT CCCAACCCAG 180
 CCCTCGTCTC CCTCGACAGC GCCCCTGCTG TCTTCCCCAC CGCAGTCACC ACCACCCGAA 240
 ATGCCACGTG GTCAGTGTGC ACTGCCCTGT TCATGTGCCCT CTGCGGGGCA GGGCCTTCCT 300
 GGTTTTGTTT ACTGCTGTAC CCAGATAGCC TCGAG 335

(2) INFORMATION FOR SEQ ID NO:750:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 648 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:750:

GCAAAGACCC AAGAACTGAA TATGCTCCGG GAACAGACCA CTGGGCTGGC AGCTGAGTTG 60
 CAGCAGCAGC AGGCTGAGTA CGAGGACCTT ATGGGACAGA AAGATGACCT CAACTCCCAG 120
 CTCCAGGAGT CATTACGGGC CAATAGTCGA CTGCTGGAAC AACTTCAAGA AATAGGGCAG 180

GAGAAGGAGC	AGTTGACCCA	GGAATTACAG	GAGGCTCGGA	AGAGTGCGGA	GAAGCGGAAG	240
GCCATGCTGG	ATGAGCTAGC	AATGGAAACG	CTGCAAGAGA	AGTCCCAGCA	CAAGGAAGAG	300
CTGGGAGCAG	TTCGTCTACG	GCATGAGAAG	GAGGTGCTGG	GGGTGCGTGC	CCGCTATGAG	360
CGTGAGCTCC	GAGAGCTGCA	TGAAGACAAG	AAGCGTCAGG	AGGAGGAGCT	CCGTGGGCAG	420
ATCCGGGAGG	AGAAGGCCCG	GACACGGGAG	CTGGAGACTC	TCCAGCAGAC	AGTGAAGAA	480
CTTCAAGCTC	AGGTACATTC	CATGGATGGA	GCCAAGGGCT	GGTTTGAACG	GCGCTTGAAG	540
GAAGCCGAGG	AATCCCTGCA	GCAGCAGCAG	CAGGAACAAG	AGGAAGCCCT	CAAGCAGTGT	600
CGGGAGCAGC	ACGCTGCCGA	GCTGAAGGGC	AAGAAGGAGG	CGCTCGAG		648

(2) INFORMATION FOR SEQ ID NO:751:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 266 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:751:

GGAAAGAATC	TAAAAGAAGA	GAAGCGACCG	GTGCTTTTAA	GGGTGTCTAA	TTTTCAAAAG	60
AGACGTCTGG	GAGTATTTTG	CTCTGGGCGT	TTGGGTGAGC	AGGACCGGGG	CGTTGGAGGG	120
TGCGGCGGGC	TTGGGAGCAG	GGAAGGTTCC	GAGTCCTAGG	GAGGCGGCAG	CGCTCGGCTA	180
TGCCCTCTGG	AGACTGGCGG	GGCTGCGGGG	CCGAGGGGAC	CCGCGAGGGA	GCCGCGCTGC	240
GGACGCGCTG	AGCGCGGGAG	CTCGAG				266

(2) INFORMATION FOR SEQ ID NO:752:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 288 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:752:

GAATTCGGCC	TTCATGGCCT	AGGATGTTTT	AAGGCTAGGC	CTGAGCGAGG	AGGAGGCAGG	60
GGAGACCTGG	CAGGTATTGA	AGTACCTGGG	AAGAAAGGCA	ATGGGGATGG	TGGTCCTGCT	120
CCAAGATGAT	AAGTGGAGGC	TGAGCGTCAC	TGGTACTGGG	GGCCATGATC	CCCAGGGCCA	180
CCCTGGCACC	AGGGTGCAGG	GGATGCGGGG	CCTGAGCAGG	AAGAACAGAG	ATCTGCGGGC	240
TGCACCGACC	CATCCCTGCC	CCTAGGCTGA	AGAACGGCAT	CACTCGAG		288

(2) INFORMATION FOR SEQ ID NO:753:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 487 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:753:

GAATTCGGCC	TTCATGGCCT	ACTGAATTTG	CTTTCTTGTC	CTCTCTTAG	TCACCTGTCA	60
CAGGAGGTTT	CTGCTCAGTA	ATGATATTGT	GAGTTAGGAT	AATAACTTTT	TTTTTTTTGT	120

GCTTCAGATT	TAGAAGAAAA	GATCCTGTTT	CCATTTGAAA	GGAAGTGTAA	GCTTTTATCT	180
TTTAACCAAC	TGAACAATAC	ACCAAAAGCA	GCCTAGGGAT	GAGCATTCT	TTGAAAGCAA	240
TTAGGTTATT	CACCTGGTAT	TAAAACTATT	TACTGTAAAA	AAATCTGTGA	CTTCATGAAG	300
TTGATTTTAA	AAGGCAGCAT	CAAAACTGA	AAAGGAAGGG	AAAAAATAGG	CAGCTTCTCT	360
GCACTTGTTT	GGAGCTCCCC	AAAACAGGAG	CCATGGAGAA	GTGGCATCAA	GACCGGGCTG	420
CCCTTTCGAG	AACACCCTGT	GGCAGTTCAG	AGACACGCTT	TTCCTACACT	GCATGCAGCC	480
GCTCGAG						487

(2) INFORMATION FOR SEQ ID NO:754:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 443 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:754:

GCTGGGTTTA	GGCGATCCTC	TTGCTTCAGC	CTCCCAAGAA	GCTGGAGCCA	CAGGCATGCA	60
CCACCACGCC	CAGTTAATTT	TTGTATTTT	TGTGGGACG	GGGTCTCACT	TTGTTGCCCA	120
GGCTTATCTG	GAACTCCTGG	TTTCAGGCAG	TTCTCCTTCC	TTAACCTCCC	AAAGTGCTGA	180
GATTATAGGT	GTGTGTGAGC	TATCACACCT	GGCCTAGAAA	ATTATAAGAA	AATATTAATC	240
ACATAATCTC	ACTACCCATT	GATGATTAA	CATCTAGTAT	ATACATATGT	ATATATAATT	300
TTAAAAGTAG	GGTTATATTA	TATAATTACT	TCATTATTCT	TGTTTTCCAC	TTAATATACT	360
TAAGATATCT	TTCAAAATCA	CTAAATACAG	GAACATAGTA	TATCATCTTT	CAGTAGCCTC	420
ATTGTATAGC	TAACCCCTC	GAG				443

(2) INFORMATION FOR SEQ ID NO:755:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 584 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:755:

GAATTCGGCC	TTCATGGCCT	ATTGATTTCC	TGGGCTCAGG	AGAGGATGGG	GAAGGGGCTC	60
CAGACCCTCG	GCGGTGCACT	GTGGATGGGA	GCCCCATGA	GCTGGAAAGC	CGTCGGGTCA	120
AATCCAAGG	CATTCTGGCT	GACCTGCGGG	ATGTGGATGG	GCTGCCCCCA	AAAGTGACTG	180
GCCCCTCTCC	TGGCACACCC	CAGCCCCGGC	CACATGAAGG	TTCCTTTGGC	TTCTCCTCAG	240
ACGTCTTCAT	CATGGACACT	ATCGGGGGCG	GGGAGGTGAG	CCTGGGGGAC	TTGGCAGATC	300
TCACCGTCAC	CAACGACAAC	GACCTCAGCT	GCGATCTGTC	TGACAGCAAA	GATGCTTTTA	360
AGAAGACGTG	GAACCCCAAG	TTACCCTGCG	GCTCGCACTA	CGACGGCATT	CGTTCCCTGG	420
CCTTCCACCA	CAGCCAGTCG	GCTCTGCTCA	CCGCCTCCGA	GGACGGCAGC	CTCAAGCTCT	480
GGAACCTGCA	GAAGGCGGTC	ACGGCCAAGA	AGAATGCGGC	GCTAGATGTG	GAACCTATAC	540
ATGCTTTCCG	GGCTCACAGG	GGCCAGTGT	TGGCTGGACT	CGAG		584

(2) INFORMATION FOR SEQ ID NO:756:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 285 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:756:

GAAATTAAAA	AAATAAAATC	AAGTTCTTGG	GTGGTGGGAA	ATTGGCCTGT	ATTTTTTCTT	60
CTCAGTGGAA	TTTGCTGAGT	AAAAAATTAT	AGGCTCAAAA	ACTGAGAACT	TTGAAGATAT	120
TGCACCATAT	TCTTTTTGTA	TTGAGTGTG	CTGATGAGAA	GTCTGAGGTC	AGTCTGTTGC	180
TTGCTCTTTC	TAGGTAAACT	GTGCTTTTTA	TATTTTTTCC	CCTCTAGAGG	TTTGAGAAT	240
TTACTCCTTA	TCCATGTTAT	TCTTAAATTT	CACCACATTC	TCGAG		285

(2) INFORMATION FOR SEQ ID NO:757:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 310 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:757:

GAATTCGGCC	TTCATGGCCT	AGAATGCTTT	GAATCCATAT	CTTTTTTCAGA	AACATACATG	60
GAAATACAGA	ACTACACCTG	TAATTACAGA	GGGCATATGA	ACCCTAGTTT	GATAAGCCTT	120
GCTTTAAAGG	ATGCAGTGTG	TTCTATTAAA	TGTATTTAAT	ACAATTGCAG	AAATGGAAAA	180
TGTGGACCTC	CATTAAACAA	ATTTTTTAGT	TCCTAATGAG	ATAAACTTGG	GACCAAACCG	240
ATTCCTCTTG	TTTGTAGTCT	CAAAAATAGT	TTCATTTTTA	GGTATTTATG	CTTTAGTGGC	300
CTTTCTCGAG						310

(2) INFORMATION FOR SEQ ID NO:758:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 196 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:758:

GAATTCGGCC	AAAGAGGCCT	AAGAAAAGAA	AGCAAGAACA	GAAAACGAAG	CCACAGGAAG	60
GGAAGTAGAC	ATTGTATGCT	TATGGTTTCT	CATTATGAAG	GTGCAGCTTG	TAGGAGGTTT	120
GTACGGATGT	GCTTTGAAGT	TATGTATATT	ACATATAACA	GGAAAAAATA	TTAAAAATAA	180
CAGTGCTGGT	CTCGAG					196

(2) INFORMATION FOR SEQ ID NO:759:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 360 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:759:

GAATTCGGCC	TTCATGGCCT	ACAGCAAATC	TGCCTTCACA	TGGTCTGCAT	TCTAGTGGAG	60
AAGTCAGATA	GAGGTAAGTA	CGAAGACCAC	AAAGCAGGTT	AAAAAGTAAG	GTGGGAAAGG	120
GATGCTATTT	TAGACAAGGT	GGTCAGGGCA	AGCCTCTCAG	AAGAGGGGAT	AAGTGCTCAG	180
AGACCTGACT	GAAGTGAGAG	TGAGCTATTG	ACACGGAGAA	GGGCATTTC	GACTCTGAAG	240
AGAAAGCAGG	GGCAGGCTTT	GGAGGGAGAG	CTTGTTTATG	TAGACAAGGA	GGGGCAAAGA	300
GTCTTGTGGA	TAAAGCAGAA	TGAACAAGAG	TAAATGGGAT	TGTAAATGAA	ATGACTCGAG	360

(2) INFORMATION FOR SEQ ID NO:760:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 192 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:760:

GGACATATGC	AGTCAAAAGT	AGGTGCCCCAT	ATATATAATG	AAATACCAAA	AGGACAATTT	60
AGAAAGTTGA	ATGGAAACAT	TATGGCATGC	TTTAGACGTT	CTGTTTTGGT	TTTCTTATTC	120
CCAGTCTTTG	ATCTTTTAGG	TCTATCCATT	GGTAAAGATA	TATTAGGACT	CACATCAACT	180
CAAGTCTCG	AG					192

(2) INFORMATION FOR SEQ ID NO:761:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 326 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:761:

GAATTCGGCC	TTCATGGCCT	AGTTTATTGC	TCCCAACTAT	ACATCTTCAG	ACTTCACTTA	60
GCGTGTACG	GGTGGTTAGG	TTCCAGGATT	ATTGAGATCT	ATTTCTACTC	ACAATTGCTT	120
ATAAAATGAA	ATCTATCGTC	ACCTTAATTG	CCTGTGCCTA	AAAATATAGC	ATGCTTGTCT	180
TGTGGGAAAT	ATTCAGCCTG	GTATGTGAGT	GACTGAAATG	CAACTCCGTG	GAAACACCCC	240
AACTCCACAC	ATTCATCCCC	TTGGTAACTC	AGCACAGTCA	CAGAACTGA	AGAAGTAAAA	300
TGATCCTCTT	TATTTGGCTT	CTCGAG				326

(2) INFORMATION FOR SEQ ID NO:762:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 205 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:762:

GAATTCGGCC	TTCATGGCCT	ACTGGCCCAA	GTGAACTTT	TAACAGGCTT	TTGGAGATC	60
TCTTTAGCTA	GATCCAAAAA	TTCATCAGGT	ATATTTCTG	TTTTCCAAGT	TCATGCAGGC	120
AATAGCTTTG	CTAATATATA	ATACTAGTTG	CCTTGTTCAA	GCTGCCATAT	CAGTTTCATC	180
ACTCCTTTCC	CAGTGCCAC	TCGAG				205

(2) INFORMATION FOR SEQ ID NO:763:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 285 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:763:

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GAATTCGGCC TTCATGGCCT AAAAATGAAT ATATTCCTAT CCTATATTAA GACACTTTCC      60
CTAACCTAAA AGTTTATTCT GTTTTAAAAA TAAATGAAAG TATTGTATG GGCCCTGGGC      120
CTGACGGAGA TATGCCCTGC CCCCTCTCTA GAGTGCTGGG AATTCTCAGG TGACCCAGTC      180
CCACAGGCAG CCAAGTGCCC ACACATTTC AGGCTGCCCT CCACCAGGGC AGCGACCTCG      240
GGTCACCAGG GACACGCACA CCTAGAAAGC CGTGGGCTCC TCGAG                        285

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(2) INFORMATION FOR SEQ ID NO:764:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 345 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:764:

```

AATTCTTTAT CATTTAGAT ATTAAGGATT TCAGATTTTA AGAGTTATCA GTGAAACTGT      60
GTTACAAGAA TATTTTGTTT CTGAGACATC TCAGTATTAT AGGTGGCTTC AGACTAACAG      120
GCACAGAATA GGATAGTGTG AAGTATCTGA TTAGCTTTAC TGTACTTGGT ACCTTTAGGA      180
CGTTCAGCCA GAGGTGATTG GAGGGATTGG CACGTCTACC ACTCGTGTGT GTATCTGTGA      240
ACCATATCTC CTTTAGTGCC TGCTTTTGAA CTTTATATAA ACAGAATGAT GCTGCCTGTT      300
TATCTCTATA ATTTTCTTCT TTCCCTTAGC ACGTGCTCAC TCGAG                        345

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(2) INFORMATION FOR SEQ ID NO:765:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 100 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:765:

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GAATTCGGCC TTCATGGCCT' AGAGAATGTT TTCATGTTAC TTATACTAAC ATTAGTTCTT      60
CTATAGGGTG ATAGATTGGT CCAATTGGGT GTATCTCGAG                        100

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(2) INFORMATION FOR SEQ ID NO:766:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 333 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:766:

GGATTGAATT CTAGACCCTG CCTCGTCATT GTGGAACCCA TGGAGCAGTT TGATGATGAA	60
GATGGCTTGC CAGAGAAGCT GATGCAGAAA ACTCAACAAT ATCATAAGGA AAGAGAACAA	120
CCACCACGTT TTGCTCAACC TGGGACATTT GAATTTGAGT ATGCATCTCG ATGGAAGGCT	180
CTTGATGAAA TGGAAAAGCA GCAGCGTGAG CAGGTTGATA GAAACATCAG AGAAGCCAAA	240
GAGAACTGG AGGCAGAAAT GGAAGCAGCT AGGCATGAAC ACCAATTAAT GCTAATGAGG	300
CAAGATCTAA TGAGGCGTCA AGAAGAACTC GAG	333

(2) INFORMATION FOR SEQ ID NO:767:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 238 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:767:

GAATTCGGCC TTCATGGCCT AGATAATATT TTATGTTTAT TGTGTGTTAG ACTGTGTTGA	60
AGTGGAACCT TTGGAACATT GTTGGAACCA GTAAGAATCC CATTCTCTAG GTATCAGGTC	120
GTAAAGTAG TTAAATAA CGTATTCCTT AATTTCTCTC AGCAGGTTCC CCTCCCTTT	180
AACTGTGTG TATAAATATA TGTGTGTGAT GTTTTCTCTT ACAAAGATAG TACTCGAG	238

(2) INFORMATION FOR SEQ ID NO:768:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 234 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:768:

GAATTCGGCC TTCATGGCCT AGGGATCCCA CCTTTTACAT CTTAGGTGTG AACAGATTCA	60
AATCCACTAT TCCTCCAGAT TTTATAGATG AGGAAACCAA GGTGCACAAG AGGGATTTTT	120
TTGTTTTGTT TTTTGTGTTT GTTTGTTTTT GAGACAGGAT TTTGCTTGTG TGCCAGGCT	180
GGAAATGCAGT GGCACAAACA TGGCTCGCTG CAGTCTCGAA CTCCTACGCT CGAG	234

(2) INFORMATION FOR SEQ ID NO:769:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 291 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:769:

GAATTCGGCC TTCATGGCCT ACGGAATGAG AAGATGAAAA ATCAAATTAA GCAGATGATG	60
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GATGTCTCTC	GGACACAGAC	TGCAATATCG	GTA GTTGAAG	AGGATCTAAA	GCTTTTACAG	120
CTTAAGCTAA	GAGCCTCCGT	GTCCACTAAA	TGTAACCTGG	AAGACCAGGT	AAAGAAATTG	180
GAAGATGACC	GCAACTCACT	ACAAGCTGCC	AAAGCTGGAC	TGGAAGATGA	ATGCAAAACC	240
TTGAGGCAGA	AAGTGGAGAT	TCTGAATGAG	CTCTATCAGC	AGAATCTCGA	G	291

(2) INFORMATION FOR SEQ ID NO:770:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 432 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:770:

CGCTGCGTGC	TTGTGAGACT	GCCTGTTCTG	GGACCAGCCC	CTGGGCTCTT	CCACCAAGAT	60
TTGGTGAGGG	TCCCCCTCTG	CCTCTCACAG	AAGCCCCTGG	CCCTGGACTG	TCCTGGGGGC	120
AGGGACACCT	GTGGCTGGGG	AAGGGATGGC	CAACAGCGGG	AAGCAGTTTG	CGCCTGGTGC	180
CTGATGATGG	TGAACCACGA	GACAGATGGA	GACGGGAGTC	AGGGGACCCT	GGGGACCCTT	240
CCAGGTCCAG	TGACCTTTTC	CCAGACAGGC	ACTCTCCAGG	CCTAGGACAG	ACAGGGCCCC	300
AACTCCTCAT	CACCCCATGA	CTTGCCCTGG	AGGAACCTGG	GGTGGGAAAC	AAGTAGTCCC	360
CCAACCTCAG	AGGCCAGAAC	CACAGGTGGG	GGACAGGGAC	CTCGACAGAG	CTGTGCCTGC	420
TCAACGCTCG	AG					432

(2) INFORMATION FOR SEQ ID NO:771:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 399 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:771:

GGTGTGGCTT	TGCCCCGTAC	GAGCGGCGCG	CCATGGAGTT	ACTGAAGGTC	TCCAAGGACA	60
AACGGGCCCT	CAAAATTATC	AAGAAAAGGG	TGGGGACGCA	CATCCGCGCC	AAGAGGAAGC	120
GGGAGGAGCT	GAGCAACGTA	CTGGCCGCCA	TGAGGAAAGC	TGCTGCCAAG	AAAGACTGAG	180
CCCCTCCCCT	GCCCTCTCCC	TGAAATAAAG	AACAGCTTGA	CAGAAGCCCT	GGCTCTCCTG	240
CTGTCCGTGG	GTGGGTGTGG	GTGTGTCGGG	GGCCCGCAGT	CCCCTGTCTG	GTGCCCCGTC	300
TGAGCCACAC	CCTCTCCGGG	TGCTGCCTGG	TGCTGAATCA	AAAGCCGTGG	CCGCCCCACC	360
CTTCCCGGGG	CAGCAGGTGA	GGAAGCCGCT	GTA CT CGAG			399

(2) INFORMATION FOR SEQ ID NO:772:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 520 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:772:

GAATTCGGCC	TTCATGGCCT	ACAAGAAAAA	AGAAAAGAAA	TCATTAACCC	CAGCTGTGCC	60
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AGTTGAATCT	AAACCGGATA	AACCATCGGG	AAAGTCAGGC	ATGGATGCTG	CTTGGATGA	120
CTTAATAGAT	ACTTTAGGAG	GACCTGAAGA	AACTGAAGAA	GAAAATACAA	CGTATACTGG	180
ACCAGAAGTT	TCAGATCCAA	TGAGTTCCAC	CTACATAGAG	GAATTGGGTA	AAAGAGAAGT	240
CACAATTCCT	CCAAAATATA	GGGAACTATT	GGCTAAAAAG	GAAGGGATCA	CAGGGCCTCC	300
TGCAGACTCT	TCGAAACCCA	TAGGGCCAGA	TGATGCTATA	GACGCCTTGT	CATCTGACTT	360
CACCTGTGGG	TCGCCTACAG	CTGCTGGAAA	GAAAACTGAA	AAAGAGGAAT	CTACAGAAGT	420
TTTAAAAGCT	CAGTCAGCAG	GGACAGTCAG	AAGTGGTGCT	CCACCCCAAG	AGAAGAAAAG	480
AAAGGTGGAG	AAGGATACAA	TGAGTGATCA	AGCACTCGAG			520

(2) INFORMATION FOR SEQ ID NO:773:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 129 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:773:

GAATTCGGCC	AAAGAGGCCT	AGTTTATTGT	TGTCATATAT	TTTATAGTGT	AGAGATTAGG	60
CATTTTAATA	AAATTTTAAA	ATTTCAGGA	TCTTACAGAA	TGCTTTTATG	TTACAGCTTA	120
CTCCTCGAG						129

(2) INFORMATION FOR SEQ ID NO:774:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 337 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:774:

GAATTCGGCC	TTCATGGCCT	ACACAACGGA	AAGCTGTTTT	TCTGATCGAG	GCTCTCTGAA	60
GAGCATAATG	CAGTCCAACA	CATTAAACCA	AGATGAGGAT	GTGCAGCGGG	ACCTGGAGCA	120
CAGCCTGCAG	ATGGAAGCTT	ACGAGAGGAG	GATTCGGAGG	CTGGAACAGG	AGAAGCTGGA	180
GCTGAGCAGG	AAGCTGCAAG	AGTCCACCCA	GACCGTGCAG	TCCCTCCACG	GCTCATCTCG	240
GGCCCTCAGC	AATTCAAACC	GAGATAAAGA	AATCAAAAAG	CTAAATGAAG	AAATCGAACG	300
CTTGAAGAAT	AAAATAGCAG	ATTCAAACAG	GCTCGAG			337

(2) INFORMATION FOR SEQ ID NO:775:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 276 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:775:

GAATTCGGCC	AAAGAGGCCT	AGTGAGCGCG	ACCATCATGT	CCATGCTCGT	GGTCTTTCTC	60
TTGCTGTGGG	GTGTCACTG	GGGCCAGTG	ACAGAAGCAG	CCATATTTTA	TGAGACGCAG	120
CCCAGCCTGT	GGGCAGAGTC	CGAATCACTG	CTGAAACCCT	TGGCCAATGT	GACGCTGACG	180

TGCCAGGCCC GCCTGGAGAC TCCAGACTTC CAGCTGTTCA AGAATGGGGT GGGCCAGGAG 240
 CCTGTGCACC TTGACTCACC TGCCATCAAG CACCAG 276

(2) INFORMATION FOR SEQ ID NO:776:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 586 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:776:

GAATTCGGCC AAAGAGGCCT ATGAAATAGA AGAAGGTAAA AATAAGGAAC AAGCAATAAA 60
 CAGTTCAGAG AACATAATGG ACATCAATGA GGAACCAGGA ACAACTGAAG GTGAAGAAAT 120
 CACTGAGTCA AGTAGCACTG AAGAAATGGA GGTGAGAAAGT GTGGTGGCTG ATACTGACCA 180
 AAAGGCTTTA GGAAGTGAAG TTCAGGATGC TTCTAAAGTC ACTACTCAGA TAGATAAAGA 240
 GAAAAAAGAA ATTCCAGTGT CAATTAAAAA AGAGCCTGAA GTTACTGTAG TTTCACAGCC 300
 CACTGAACCT CAGCCTGTTC TAATACCCAG TATTAATATC AACTCTGACA GTGGAGAAAA 360
 TAAAGAAGAA ATAGGTTCTT TATCAAAAAC TGAAACTATT CTGCCACCAG AATCTGAGAA 420
 TCCAAAGGAA AATGATAATG ATTCAGGCAC TGGTTCCACT GCTGATACTA GCAGTATTGA 480
 CTTGAATTTA TCCATCTCTA GCTTTCTAAG TAAAACTAAA GACAGTGGAT CGATATCTTT 540
 ACAAGAAACA AGAAGACAAA AGAAAACATT GAAGAAAACA CTCGAG 586

(2) INFORMATION FOR SEQ ID NO:777:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 463 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:777:

GAATTCGGCC TTCATGGCCT AGTTTATATA GAGTAGGTTT ACATAGAAAA GGAAAGTTCA 60
 CTGAGATTTC TAGGTACAAG ATCTANCAAC ATGCACAAAC CAATATTGTT TATGTATAAC 120
 AGCTTCAAAC AATTAGAAAT TGTAATAACC ATTATGAAAG TGATGAAAAT TGTATTGCTT 180
 AGTATTCTAC CAAAATTATT AAGTAATTTT TTTTTTTTTT TTTNANACGG AGTCCCGCCT 240
 GGGCCACAAG NGCNAAAATT TGTTTCNAAA AAAAAAAGA AAAGAAAGAA AAAAAATTGA 300
 ACTCTCAATC CCTAGATGTA AAATCAACCT CGTGTTCTTG ATTTCACCAG TAATTCATAA 360
 CCACAACTGT TGTGTCCTGA ACACTTACTA TGCTTGGCAT ACTTATAATT TTTATTTTCA 420
 TTTATCCTCA AATTTAAGAT GAAGTTTCTC CTACTAACTC GAG 463

(2) INFORMATION FOR SEQ ID NO:778:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 466 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:778:

GAATTCGGCC	TTCATGGCCT	AGCTGGGAGT	TACCTGNTAT	CCTGATGGTG	CCATGTGCTA	60
GCTGGGTGAC	AATAACCCAG	CCACCTAACA	TCTCAAAGAT	TGTTCCTTTT	TGTGTGAAAT	120
AGGGATAGAG	TTGTCTACTT	CCCAGAGCCA	GATAGAGAAC	TTAAGAGATG	AATCTGAAAA	180
TACAATAGCC	TAAATAAATT	CAAGGAAACA	CTATTATCTT	ACTGGATCTT	TCCAGCAACC	240
ATGTTACTTT	TGGCTGGATT	TTGTATTTTC	CAATTGTGTA	ATGACACAAC	AAAGAGCTAG	300
GTAGGTTAAG	TAAATGGTTT	CAGATAATAA	GCCCAGTTAG	CCCAGACGTT	TATTTTCCAT	360
TTGCATAGAA	AATGAATGTT	TTATGCATAC	ATTTGTTTGC	CCAGGGCTAG	GATATTACTT	420
GCAATATGATG	TTCTTATATA	ATTAAAAAAA	AGAATACAAC	CTCGAG		466

(2) INFORMATION FOR SEQ ID NO:779:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 519 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:779:

GAATTCGGCC	TTCATGGCCT	AATTCCACAG	GGAAATGGGC	AGACTGAACC	AGTCCAGGTG	60
GTGAATTTTC	CAAGAACATA	GTTTAAGTTG	ATTAAAAATG	CTTTTAGAAT	GCAGGAGCCT	120
ACTTCTAGCT	GTATTTTGTG	TATGCTTAA	TAAAAATAAA	AATTCATAAC	CAAAGAGAAT	180
CCCACATTAG	CTTGTTAGTA	ATGCTCTGAC	CAAGCCGAGA	TGCCCATCTT	CTTAGTGATG	240
GCGGCGTTAG	GGTTTGAGAG	AAGGGAATTT	GGCTCAACTT	CAGTTGAGAG	GGTGCAGTCC	300
AGACAGCTTG	ACTGCTTTTA	AATGACCAA	GATGACCTGT	GGTAAGCAAC	CTGGGCATCT	360
TAGGAAGCAG	TCCCTGGAGA	AGGCATGTTT	CCAGAAAGGT	CTCTGGAGGG	ACAACTCAC	420
TCAGTAAAC	ATAATGTATC	ATGAAGAAAA	CTGATTCTCT	ATGACATGAA	ATGAAAATTT	480
TAATGCATTG	TTATAATTAC	TAATGTACGC	AGACTCGAG			519

(2) INFORMATION FOR SEQ ID NO:780:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 321 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:780:

GAATTCGGCC	TTCATGGCCT	ACTAGACCCC	CGCCACAGCA	GCCTCTGAAG	TTGGACAGCA	60
AAACCATTGC	TCTACTACCC	ATCGGTGTCC	ATTTATAGAA	TAATGTGGGA	AGAAACAAAC	120
CCGTTTTATG	ATTTACTCAT	TATCGCCTTT	TGACAGCTGT	GCTGTAACAC	AAGTAGATGC	180
CTGAACCTGA	ATTAATCCAC	ACATCAGTAA	TGTATTCTAT	CTCTCTTTAC	ATTTGGTCT	240
CTATACTACA	TTATTAATGG	GTTTTGTGTA	CTGTAAAGAA	TTTAGCTGTA	TCAAAC TAGT	300
GCATGAATAG	ATTCTCTCGA	G				321

(2) INFORMATION FOR SEQ ID NO:781:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 560 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:781:

GAATTCGGCC	TTCATGGCCT	AAATGGGAAT	CATCATTGCA	TAACAAACCT	AAAGAGAAAA	60
TGAGAACATT	TACGAAGAAG	AAACAGAGTT	ACTGTACCAA	GGGCAAAAAG	AAAAGAAGGG	120
GGAAAAA	TAAGTCCATA	AAAGAAAAAC	AAAAGGAATC	CATGAGCCTG	GACGACAAGC	180
CGTGGGGGAT	GTAAGAAGGT	TTGGAACCCA	AAAGGCAAGT	CTAATCAGCT	GGGGTAACAT	240
GGCGAGGCAG	TTCCACATGC	TGAGACTTGT	GGCTACCACA	TTAAAAAAGA	CTGTGCATAT	300
TCTAAATGAC	AGCAGTCCTG	CAGTGACGTG	GATATTCAC	CTAGAAGCTA	TGCAGGCAGG	360
CGTGGGAAAA	GCGAAGAGAT	GTTGCACCAT	GCAGCTGCAA	TCTTTATGTC	TCTACTGGCA	420
CAACCGAAAA	GAGTAATGTG	GAAATTATCC	AGAGAATTTA	GGTGAGAAAA	ACAGAAGCCA	480
TCAGATTTTC	TCCTTTAAAT	CTTCAGAGGG	GTATACACTC	CCCTGGAAAA	CCAAGTTGCC	540
TCTCTGCTCA	CATCCTCGAG					560

(2) INFORMATION FOR SEQ ID NO:782:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 633 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:782:

GAATTCGGCC	TTCATGGCCT	AGGGGAGTCC	TCATTCTGAC	CTCAAAGAAA	GGACTGTATT	60
GTCTGGCTCC	ATAATGCAGG	GGACACCAAG	AGCAACAAC	GAAAGCTTTG	AAGATGGCCT	120
TAAATATCCC	AAACAAATTA	AAAGGGAAAG	TCCTCCCAT	CGAGCATTG	AAGGTGCCAT	180
TACCAAGGA	AAACCATATG	ATGGCATCAC	CACCATCAAA	GAAATGGGGC	GTTCCATTCA	240
TGAGATTCCA	AGGCAAGATA	TTTAACTCA	GGAAAGTCGG	AAAATCCAG	AAGTGGTCCA	300
GAGCACACGG	CCGATAATTG	AGGGTTCCAT	TTCCCAGGGC	ACACCAATAA	AGTTTGACAA	360
CAACTCAGGT	CAATCTGCCA	TCAAACACAA	TGTCAAATCC	TTAATCACGG	GGCCTAGCAA	420
ACTATCCCGT	GGAATGCCTC	CGCTGGAAAT	TGTGCCAGAG	AACATAAAAG	TGGTAGAACG	480
GGGAAAAATAT	GAGGATGTGA	AAGCAGGCGA	GACCGTGGT	TCCCGGCACA	CGTCAGTGGT	540
AAGCTCTGGC	CCCTCCGTTT	TTAGGTCCAC	ACTGCATGAA	GCTCCCAAAG	CACAACTGAG	600
CCCTGGGATT	TATGATGACA	CCAGTGTCTC	GAG			633

(2) INFORMATION FOR SEQ ID NO:783:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 407 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:783:

AAATGACACT	GAATGACACG	TTAGCCAAAA	CTAACAGAGA	ATTATTAGAT	GTGAAGAAAA	60
AATTTGAAGA	TATAAATCAG	GAATTTGTAA	AAATAAAAGA	TAAGAATGAA	ATATTAAAAA	120
GAAACCTGGA	AAACACTCAG	AACCAATATA	AAGCTGAGTA	CATCAGCCTG	GCAGAGCACG	180
AGGCAAGAT	GAGCTCGCTA	AGTCAGAGCA	TGAGAAAGGT	GCAGGATAGT	AATGCTGAAA	240
TCTTGGCCAA	CTACAGAAAA	GGCCAAGAAG	AGATTGTGAC	ACTGCATGCC	GAAATTAAAG	300
CCCAGAAGAA	GGAGCTCGAC	ACAATACAAG	AATGCATTAA	GGTAAATAT	GCCCCAATTG	360
TCAGCTTTGA	GGAGTGCGAG	AGAAAATTTA	AAGCAACAGA	GCTCGAG		407

(2) INFORMATION FOR SEQ ID NO:784:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 342 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:784:

```
GCAGAAAAGT CAGAACAATT TGAGGAGCTT CAAAGCATCC TTAAGAAAGG GAAACTAACT    60
TTTGAGAATA TTATGGAAAA ACTGCGAATC AAGTATTCCG AAATGTACAC CATAGTCCCT    120
GCAGAGATTG AATCCCAGGT GGAAGAATGC AGAAAAGCTT TAGAAGACAT AGATGAGAAG    180
ATTAGCAATG AAGTCTTAA AAGCTCACCA TCATATGCAA TGAGGAGAAA AATAGAAGAA    240
ATTAACAATG GGCTTCATAA TGTGAAAAG ATGTTGCAGC AGAAAAGCAA AAATATTGAG    300
AAAGCTCAAG AAATTCAAAA GAAAATGTGG GACTCACTCG AG                                342
```

(2) INFORMATION FOR SEQ ID NO:785:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 456 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:785:

```
GAGATAATGG ATGAAAGGAT TCAGAGGAAA GTAGAGAAAC TAGAGCAACA ATGTCAGAAA    60
GAAGCCAAGG AATTTGCCAA GAAGGTACAA GAGCTGCAGA AAAGCAATCA GGTTCGCTTC    120
CAACATTTCC AAGAACTAGA TGAGCACATT AGCTATGTAG CAACTAAAGT CTGTACCTT    180
GGAGACCAGT TAGAGGGGGT AAACACACCC AGACAACGGG CAGTGGAGGC TCAGAAATTG    240
ATGAAATACT TTAATGAGTT TCTAGATGGA GAATTGAAAT CTGATGTTTT AACAAATTCT    300
GAAAAGATAA AGGAAGCAGC AGACATCATT CAGAAGTTGC ACCTAATGTC CCAAGAGTTA    360
CCTTTTGATA GATTTTCAGA AGTTAAATCC AAAATTGCAA GTAAATACCA TGATTAGAA    420
TGCCAGCNGA TTCAGGAGTA TACCAGTGCT CTCGAG                                456
```

(2) INFORMATION FOR SEQ ID NO:786:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 488 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:786:

```
GAATTCGGCC TTCATGGCCT AGGGGTGAGA GTGTAGACGG CTTTCCAGT TGTATCCAAG    60
GCAGTCAGAC AGGGGGATT GGGCTGTGTT GTGCCCCAGC GCTGCAAGGT GGCCAACAGC    120
GACGGCGGTC GGGGGACACC TGCAAGTGAGA GGCTCCCCTC TCAGCACA CTGCTCGCTT    180
CCCTCAGGCT TTGGCTGATT TGGATCTGGT TGCTGAACTT CCAACAATTC CTCAAAATCA    240
TCCACAAAGA ACTCCTTCAG TGGAGGGCGC TTTGGCCTCT TCAGGGTGTT CAGAAGCTGC    300
TGGATTTTGG AGGACACTCT GCTGTTTACA GGGACACCAT CTGCTGTTTC CAGCATGCTC    360
CCGCTGCACC CCCGAGGAAC ACTTCTCACA GAAGCCACCT GTGGACGCTC AAAGTACGAA    420
TGCTCCACGA GGCCCGTGGT GACATCAGGA GGGGCAGAAT GCAGATCTAT GTGGGTGTGG    480
GCCTCGAG                                488
```


(2) INFORMATION FOR SEQ ID NO:787:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 452 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:787:

GAATTCGCCT TCATGGCCTA AGTGTCGGA ACATATGTCA TGATTCTATG TCCAAACAAC	60
AGGCCAACCC TCAGGACAGA CCCCGCCACC CCCCTTCTCT GCAGCTCCTG GCAGGGACGG	120
TGCACAGTGG TGCCGTGTGC AGGGGGCCAG CGCAGCCACT GGGCATCTGG GGCAGCGCTG	180
GTCGCCTGGC CACCTCCTTG CTGGGGCCGC TGGGCCTCCG GCCTAGAAGG ACAGGAAGCC	240
ATCCACCTCA AGGCGCAGGA AGGGGTCCAG CAGGGCCCCG AGCTTCCAGA TGGTGGCAG	300
GCTCAGCAGG GCGGCACCA GCCCTCGAA GGGCCTGGGG TTCACCATGT ACACGTAGGC	360
GACCAGCAGG GTGCCAGCA GCAGCCTCAG GATCAGCAGC CTGAGAATCT CCAGCTGGAT	420
GTCTCCATC TGGTCCCTAG ACCTGCCTCG AG	452

(2) INFORMATION FOR SEQ ID NO:788:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 388 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:788:

GAATTCGGCC TTCATGGCCT ACAGGACAGA GGCAATAGT AGACAAAGGT GAAGCCAAAG	60
GCATAATTAA GGAAGGAAGA ACGATATTAC CAAAAGATGA AACTGAAAAG AAAGTCTTAA	120
CTGTGTCAA TTCTCAAATT GAAACTGAAA TTGAAGTTCC ATCGTCCGCA GTTCCAGAAC	180
ACAGAATGTA TGAAAATCAA AGTCAGGTGG TTCTTGTAGA AAACCTTCAT GTTAACAAAA	240
CAAATGAAAC AATCAGACAT GAAAATAAAC CGTATGTTCC TAGTTCAGCA CAAATGACAA	300
GAAGGAAATT CCAAAGGCT AAGCCAAATT TGGGAAGAGC ACACAGTAAG AAAGAGGAAC	360
CAGTTTTAGA AAAAGTCACA AACTCGAG	388

(2) INFORMATION FOR SEQ ID NO:789:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 457 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:789:

GCCTGAAGAC ATCAAAAAGG AGGCAGCCCG GGCTTCTAGG AAGATCTGCT TTGTGTGCAA	60
GAAAAAGGGA GCTGCTATCA ACTGCCAGAA GGATCAGTGC CTCAGAAACT TCCATCTGCC	120
TTGTGGCCAA GAAAGGGGTT GCCTTTCACA ATTTTGTGGA GAGTACAAAT CATTTTGTGA	180
CAAACATCGC CCAACACAGA ACATCCAACA TGGGCATGTG GGGGAGGAAA GCTGCATCTT	240
ATGTTGTGAA GACTTATCCC AACAGAGTGT TGAGAACATC CAGAGCCCGT GTTGTAGTCA	300
AGCCATCTAC CACCGCAAGT GCATACAGAA ATATGCCAC ACATCAGCAA AGCATTTCTT	360

CAAATGTCCA CAGTGTAACA ATCGAAAAGA GTTTCCTCAA GAAATGCTGA GAATGGGAAT
TCATATTCCA GACAGAGATG CTGCCTGGGA ACTCGAG

420
457

(2) INFORMATION FOR SEQ ID NO:790:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 582 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:790:

GAATTCGGCC	TTCATGGCCT	AGCGGCAGCG	GCTCTTCAAA	GCGGAGCCGG	GAGTTTTTGC	60
TACAGTTTTC	GCCACCATGA	GTGCGAGCTA	TAATGATGAG	CTGCAGTTCT	TGGAGAAGAT	120
CAATAAAAAC	TGCTGGAGGA	TCAAGAAGGG	CTTCGTGCCC	AACATGCAGG	TTGAAGGTGT	180
TTTCTATGTG	AATGATGCTC	TGGAGAAATT	GATGTTTGAG	GAATTAAGGA	ATGCTGTGCG	240
AGGTGGTGGT	GTTGGTGGCT	TCCTGCCAGC	CATGAAACAG	ATTGGCAATG	TGGCAGCCCT	300
GCCTGGAATT	GTTTCATCGAT	CTATTGGGCT	TCCTGATGTC	CATTCAGGAT	ATGGGTTTGC	360
TATTGGGAAC	ATGGCAGCCT	TTGATATGAA	TGACCCTGAA	GCAGTAGTAT	CCCCAGGTGG	420
TGTCGGGTTT	GACATCAACT	GTGGTGTCCG	CTTGCTAAGA	ACCAATTTAG	ATGAAAAGTA	480
TGTCCAGCCT	GTGAAGGAGC	AACTTGCCCA	AGCTATGTTT	GACCACATTC	CTGTTGGGGT	540
GGGGTCAAAA	GGTGTCTATCC	CAATGAATGA	CAAAGACTCG	AG		582

(2) INFORMATION FOR SEQ ID NO:791:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 468 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:791:

GAATTCGGCC	TTCATGGCCT	ACATTTTCTG	AGAAAGGTTT	GGATGACTGA	AATATTTCTT	60
CTACAGTCAA	GGACTTTGGC	ATGTGGTGGC	TGAAACTGAG	CTTTTTTGTG	TGGGCTCCAG	120
TTCTCACTGT	TCTGCAATGC	TCATGGCAAG	TTGAATGGTG	AGCTAGCTTA	TAAATTAAAG	180
AGCTCTGAAC	TGTATTCAGA	CCGACTGGGT	ATCTAGCTTA	CTGTTTTAAC	ATCATTGTTG	240
AAACCAGACC	CTGTAGTCCA	GTGGTGCTGC	CCTGTTGTGC	AAACTGCTCC	TTTTTCTCGT	300
GTTTTTGTA	AGAGCTTCCA	TCTGGGCTGG	ACCCAGTTCT	TGCACATACA	AGACACCGCT	360
GCAGTCAGCT	AGGACCTTTC	CGCCATGTAT	TCTATTCTGT	AGTAAAGCAT	TTCCATCAAC	420
AATGCCTAAT	TGTATCTGTT	ATTTTGGTT	TAACACACAC	TGCTCGAG		468

(2) INFORMATION FOR SEQ ID NO:792:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 519 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:792:

GAATTCGGCC	TTCATGGCCT	ACGTGGCTAT	AACTGGAAAA	CTGGATCCGA	AATCGACCAG	60
TAAACTGGGT	AGCTCGGTCT	ACGCCCCGCC	CACCACCCTT	GCTAGCCAAT	AGCCTTCACA	120
ACTCTTCTGC	CACTCCCGCC	CATTCCAGTG	CTGTGCCGCT	GCTTTTCTT	CCACTCGGAT	180
CTCTTGAGCG	CCCTTAGCCC	GCTGTATACG	CGCCCCCTCCT	CGGCTTCAGT	AGGCAAGAGG	240
GCCATCTGCC	CTTCCTTCCT	GAAGGTAGAG	GGGACAACAC	CAGCTACGAC	GGGGACTCCA	300
GAAGTCCATC	TCCCGAACAG	CAGCGGGGCG	AAAAGAAAGA	AAAAGGGTTT	CCGAAGACTC	360
CTACTCACAC	CCACGCTTTC	CCTTAACCCG	GAAGTGATTT	CCGCCCCCTC	TCTCCCTCTT	420
CGGTTGATAC	TGGAGGAGAA	GGACGGCCAG	GTCTGGCCCG	GCATGCCCTG	GGCTTCCGGT	480
GACCTCTGGC	CCTTTTCTGT	CGTCCACTCT	CCGCTCGAG			519

(2) INFORMATION FOR SEQ ID NO:793:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 338 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:793:

GAATTCGGCC	AAAGAGGCCT	ACAGAAACAT	CCAATTCTCA	AACTGAAGCT	CGCACTCTCG	60
CCTCCAGCAT	GAAAGTCTCT	GCCGCCCTTC	TGTGCCTGCT	GCTCATAGCA	GCCACCTTCA	120
TTCCCCAAGG	GCTCGCTCAG	CCAGATGCAA	TCAATGCCCC	AGTCACCTGC	TGCTATAACT	180
TCACCAATAG	GAAGATCTCA	GTGCAGAGGC	TCCGAGGCTA	TAGAAGAATC	ACCAGCAGCA	240
AGTGTCCCAA	AGAAGCTGTG	ATCTTCAAGA	CCATTGTGGC	CAAGGAGATC	TGTGCTGACC	300
CCAAGCAGAA	GTGGGTTTCA	GATTCCATGA	ACCTCGAG			338

(2) INFORMATION FOR SEQ ID NO:794:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 756 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:794:

GAATTCGGCC	AAAGAGGCCT	ACCAGGATGG	TCTCAATCTC	CTGACCTCAT	GATCTGCCTG	60
CCTCGGCCTC	CCAAAGTGCT	GGGATTACAG	GCGTGAGCCA	CCGCACCCGG	CCCTAAACCC	120
TAGGTTTTGA	CTTCTGTAAG	AAGGAAAGAT	TTAAACAAAC	AAACAAACAT	TAAATTACAA	180
CCATAATAAA	CAAAAAAACA	CTAAACTAAA	TTACAACCAT	AATAAAATCT	CCCAAAGTCC	240
GTAGGCACTG	ACATATTACA	GCCTTGCCAA	ATCAGAATAG	ATTTCTCATG	TGTTGTCAAT	300
TTACCAGACA	CAAAGAGTAG	CTCAGATCTC	ATAGACTCTT	CAGATCTTGT	AGACTAATTT	360
CAAGTCTTTT	TAAAGTTTTG	AAAAACATGT	GCTATTTGGA	ATTACGTCAT	CCTCGAATAT	420
TAAACCTGAG	CTCAAAAACC	TATTGTTTGA	TATTGGAAAT	AGTTAACTCC	AGTTTTCTTC	480
TATTAAGATA	AAATTCTTTC	ATCATGTCTG	TGCCCTCTAA	AATAATACTC	CTATTGCTTT	540
GTCTTCCCCT	TCTCCCCTCC	TAGTCCTTCT	TTAGTCATTC	TATTTAGAAT	CAAGTCGCTC	600
ATGAGTTTAA	GAATTAGAGC	AGCAAGAAAT	TGGGCTAGAG	ATGTACAAA	GCTTTGGACA	660
ATAGTAGTTT	TGCTTGTCTT	CATTCTTATT	AGAAGTGCTG	TTAATTTACT	GATAAATTCT	720
AGGACGGAAG	ACAAATCTTT	GCAACTGGTA	CTCGAG			756

(2) INFORMATION FOR SEQ ID NO:795:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 648 base pairs
- (B) TYPE: nucleic acid

(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:795:

GAATTCGGCC	AAAGAGGCCT	ACCAGGAAGC	TCTCCTGCTT	GTCATGAAGT	GAGAACAAATG	60
AAAAGTCATA	GCAGATACTC	AGTTTAACTC	TGTGTAGAAC	CTATTAGTGT	TTGAGCTGTT	120
ATTCAGATTT	GAATTCAGAC	TGTGTGTTGT	TTGCTTATGG	ACACTGCCTG	TCGTTCTGTC	180
ACTGTAAAT	TAATGAGTCT	ATAAGGTTT	TCTTCCAGAG	GCCATAGGTG	ACATCACTAA	240
AATTGCAAGA	TAAATTGTAA	TCTTTGNTGN	TGCTGCACTC	CCCAACCTCT	CCCCACCCC	300
CCGTGGTGTG	CTGCTTTCTA	GATGAGCGTG	TTTTGGAGCA	GGCCCATCTG	GGACACTCTA	360
TGCTTTCACC	AAGGAAGTGC	GATCTGAGCA	GCCACAATCC	AGCCAAAAGA	GGATCGTAGA	420
TATTGCTCT	GATCAACTAG	ATGAAAATAT	AGCAGAAATG	ATTAGCCCCA	CTGCTCTGTT	480
TTATCCAAC	GAGTCTCTGA	CCAGCAATTG	GTGCATAATT	ATTACAGCAA	AAGTTAAGAA	540
ATGAACTGT	AGCAATTATG	TAAATGAATG	TGTTGGCCTC	TTAATACCTG	TTACTAGTGG	600
ACTTCCTGTG	AGGAAGTTAG	TTTTTTGTTT	TGATGAAATG	CTCTCGAG		648

(2) INFORMATION FOR SEQ ID NO:796:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 610 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:796:

GAATTCGGCC	AAAGAGGCCT	AAGAGGCTGG	CCCCAGTCCC	AAGGAACAAG	AGATGGTCAA	60
GTCGCTAGAG	ACATATCAGG	GGACATTAGG	ATTGGGGAAG	ACACTTGACT	GCTAGAATCA	120
GAGGTTGGAC	ACTATACATA	AGAACAGGCT	CACATGGGAG	GCTGGAGGTG	GGTACCCAGC	180
TGCTGTGGAA	CGGGTATGGA	CAGGTCATAA	ACCTAGAGTC	AGTGTCTGT	TGGTCCTAGC	240
CCATTTGAGC	ACCCTGCCAC	TTGGAGTGGA	CCCCTCTAC	TCTTCTTAGC	GCCTACCCTC	300
ATACCTATCT	CCCTCCTCCC	ATCTCCTAGG	GGACTGGGCG	CAAATGGTCT	CTCCCTGCCA	360
ATTTTGGTAT	CTTCTCTGGC	CTCTCCAGTC	CTGCTTACTC	CTCTATTTT	AAAGTGCCAA	420
ACAAATCCCC	TTCTCTTTT	TCAAAGCACA	GTAATGTGGC	ACTGAGCCCT	ACCCAGCACC	480
TCAGTGAAGG	GGGCTGCTT	GCTCTTTATT	TTGGTCCCGG	ATCCTGGGGT	GGGGCAGAAA	540
TATTTTCTGG	GCTGGGGTAG	GAGGAAGGTT	GTTGCAGCCA	TCTACTGCTG	CTGTACCCTA	600
GAAGCTCGAG						610

(2) INFORMATION FOR SEQ ID NO:797:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 286 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:797:

GAATTCGGCC	AAAGAGGCCT	AGCCACTATC	CTGGTTACTT	GTGGATTAC	CAAGCAGTCC	60
AGCAAGTCAT	CCGTAGAAAT	GAATGTTTGA	GGAGTCGTAG	TAGTATTGA	GGCAATCTGT	120
TCCTCAATTG	CATTTTCACT	GTTGCTCATT	ATTGTTGTC	TCTTGGCACA	ATGCAATTTT	180
CCAAAGTGTT	CTCCATCCTT	GTCCACAAAG	TCTTTCCCAT	CACTTCCAAA	TATGCCTCCT	240

CTTTCTGAAG GCGGTTCTTC GGACCTCTGT GCTACAGGGA CTCGAG

286

(2) INFORMATION FOR SEQ ID NO:798:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 163 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:798:

GAATTCGGCC AAAGAGGCCT AGTTTTTAT TGGTTGGAG ACTAGAGCCA ATAGTATAAT	60
GTTCTCAAAG GAAACAGACT TGAGTTGTTG GATTAGAGGA ACTAACCCAA CTTATATGAT	120
TTTTTTTTTG TTTTGTCTG GTAGTTATGG CACTAGTCTC GAG	163

(2) INFORMATION FOR SEQ ID NO:799:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 443 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:799:

GAATTCGGCC TTCATGGCCT AGAGGGAATG CGGAGAGGGG TGGAGAAATT CCATCTTTGT	60
TAGGGCAGCA GTCAAGGATG AGTGAGTTAG CCTCTTAAGG AAGAGGCTAA GCTGTTAGAA	120
TAAAGAGGTT TACAACATCA GCGGCTTAAA TCAAATAGAA GTGTGTTTCT CTTTCACATG	180
ACAGAGTAGA TGTGGCCTGG CATCTAGAAA GCATATTGT CTCTGCTCCA CTGTGCTCTC	240
CAGGGACCCA TTCTTCTCTT GTCTTCATGC TCCATCACTT CCTAGGGTGT TGTCTACACC	300
TGCATAGCCA TAGCTAATTT TCCATTCTCA GCACCAACCA GGGGAAGAGG AGGAAAGGTA	360
GCCTCCTTT CATGATAGGT GTGAAGTTAT GCAGGACACT CTCAGGGTGA ATGGACCACA	420
GTGTGGCTCC TCCTGGGCTC GAG	443

(2) INFORMATION FOR SEQ ID NO:800:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 305 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:800:

GCATGTGCAG CGGCAAAGAG AACCCGGACA GTGATGCTGA CTTGGATGTG GATGGGGATG	60
ACACTCTGGA GTATGGGAAG CCACAATACA CAGAGGCTGA TGTATCCCC TGCACAGGCG	120
AGGAGCCTGG TGAAGCCAAG GAGAGAGAGG CACTTCGGGG CGCAGTCTTA AATGGCGGCC	180
CTCCCAGCAC GCGCATCACA CCTGAGTTCT CTAAATGGGC CAGTGATGAG ATGCCATCCA	240
CCAGCAATGG TGAAGCAGC AAGCAGGAGG CCATGCAGAA GACCTGCAAG AACGGTCGAC	300
TCGAG	305

(2) INFORMATION FOR SEQ ID NO:801:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 464 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:801:

GAATTCGGCC	AAAGAGGCCT	AAACACTCAA	ATTTTACATT	TTGAGCAGTA	TTACGCCTG	60
AATTAATTCA	CAAGTTTCAA	GGTCACTAAC	TTTGGTTATA	TTATATTATT	ATTTTCCAAT	120
TTAGCCACCT	CTTATTTTGT	ATAATAGAGC	ATACAGCAGC	ACATAAAACG	CAAAACTCTA	180
GGACATAAAA	AGTGGCATTG	GGACGATGTT	GCTCTGAAAT	TTATGCATTA	ATTAAACCGG	240
TATATATGTA	TGCATTAATT	AAACCAATAT	TTATGAAGTT	CCTACTGTGT	TACAGACGTG	300
GATCCAGGCA	CTGAGGATGC	AGCAGGCCAT	CCAAATATAA	AGTTACTTCC	TTAGGAAGCT	360
TCCATTCTAA	TGGGAGAGTG	TTGTTAAAGA	GATATATAAT	AATATGTAA	ATGAATCCAT	420
AATGGTGAGT	ATTATGAAGA	ATAAAATTGC	CAGGTTTTCT	CGAG		464

(2) INFORMATION FOR SEQ ID NO:802:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 650 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:802:

GAATTCGGCC	AAAGAGGCCT	AATCTTCTGC	CTGTTCTGAA	AAAGCTTTC	TTCTTGATG	60
TTGTATCAG	AGGGGGAAAG	GTCCTTACTG	TTTTTCCAGA	CCTACAGTTG	TGATAGAGGC	120
TCCTCCAGC	CCCGCCACA	GACCCCAACA	GTGCCCTCTC	TCACAAATGG	ATTCTGGGGC	180
TTGGTCTTTA	TTTTTGTTTT	TGTTGGGGGC	AGCATATGGA	ACCCAAAAAT	AGTATCATAG	240
CCTAAATTTG	GAGCTTTGTG	CCAGCCTTGT	CTGTAGGATG	ACCCGTGTGG	GTCTCACCTG	300
GTGACTGGGA	GTCCACAGGG	GTCAGTTAGT	AGCAGGGAGC	TGCAGGGCGC	CTGTCAGCAG	360
AGACCGTCTC	ATTCCCCAAA	CCCAGGAGCC	AGAGGAACTG	ACGCCCGGAT	AAATGCCCAA	420
GCCGCCCCGG	GTGGGATTAG	TCGTCTACCT	TCCCAGAAAT	ACACCCCTCC	ATCCTGTGAC	480
TTGGATACAG	TTTACTGATG	AAATTAGGGA	ACCTCCTGCG	CCTTACCAAG	AAGCTGTGGC	540
TGGAACCTTAG	TCAATGAAAA	ATGATTGTA	AACTCTTTGG	AGCTGGCTTT	GAAAGAATGT	600
TTAAAATGAT	AGCTGATACT	GCCAGACAAC	AGAACAGGCC	GGCCCTCGAG		650

(2) INFORMATION FOR SEQ ID NO:803:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 101 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:803:

GAATTCGGCC	AAAGAGGCCT	AAGAGAACAG	GAGCATTACA	GTAAATTCC	TAAGTAGCCA	60
ACTGATTGTC	AGTGCCAGAA	ATGAATACCG	ATCCACTCGA	G		101

(2) INFORMATION FOR SEQ ID NO:804:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 723 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:804:

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GAATTCGGCC AAAGAGGCCT AGCTCTCTGT ACCCAAGGAA AGTGCAGCTG AGACTCAGAC      60
AAGATTACAA TGAACCAACT CAGCTTCCTG CTGTTTCTCA TAGCGACCAC CAGAGGATGG      120
AGTACAGATG AGGCTAATAC TTACTTCAAG GAATGGACCT GTTCTTCGTC TCCATCTCTG      180
CCCAGAAGCT GCAAGGAAAT CAAAGACGAA TGTCTAGTG CATTTGATGG CCTGTATTTT      240
CTCCGCACTG AGAATGGTGT TATCTACCAG ACCTTCTGTG ACATGACCTC TGGGGGTGGC      300
GGCTGGACCC TGGTGGCCAG CGTGCATGAG AATGACATGC GTGGGAAGTG CACGGTGGGC      360
GATCGTGGT CCAGTCAGCA GGGCAGCAAA GCAGACTACC CAGAGGGGGA CGGCAACTGG      420
GCCAACTACA ACACCTTGG ATCTGCAGAG GCGGCCACGA GCGATGACTA CAAGAACCCT      480
GGCTACTACG ACATCCAGGC CAAGGACCTG GGCATCTGGC ACGTGCCCAA TAAGTCCCCC      540
ATGCAGCACT GGAGAAACAG CTCCTGCTG AGGTACCGCA CGGACACTGG CTCCTCCAG      600
ACACTGGGAC ATAATCTGTT TGGCATCTAC CAGAAATATC CAGTGAAATA TGGAGAAGGA      660
AAGTGTGGA CTGACAACGG CCCGGTGATC CCTGTGGTCT ATGATTTTGG CGACATCCTC      720
GAG                                                                    723

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(2) INFORMATION FOR SEQ ID NO:805:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 406 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:805:

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GAATTCGGCC TTCATGGCCT ACGGCCAAAG AGGAGGAGAT GCGCCAGTC AGGGAGCGGC      60
CGTGGCCCG ACAGTGAGGA AGCGCGAAGG CGGAGCAACC GAGGAATCCT CCGGAGAAGA      120
ATCAGAGCCG TCGTACCGC CACTACCGCC ACCACCATGG AAGGAGCAAA GCCGACATTG      180
CAGCTCGTGT ACCAGGCAGT GCAGGCGCTT ACCACGACCC AGATCCCAGC GGAAAGGAGC      240
GCGCCTCTTT TTGGCTTGGG GAGCTGCAGC GTTCGGTTCA TGCATGGGAG ATCTCAGACC      300
AGTTGTTACA GATCCGGCAG GATGTGGAGT CATGCTATTT TGCTGCACAG ACCATGAAAA      360
TGAAGATTCA GACCTCATT TATGAGCTCC CCACAGTACT CTCGAG                      406

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(2) INFORMATION FOR SEQ ID NO:806:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 329 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:806:

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GAATTCGGCC TTCATGGCCT ACGCCCGGGT TGAAGTGTG CAGTCAATGA GCTCCCGCTC      60
CTCCTGGATC CGTCTGTAGG TCTCCCCGGT GTGCATGAGC AGTCACTCA CTGGCTTCTT      120
TAGGTGTTCC CTGAGGGCTT CCTGCTGCTT CTTCCGCAGG GCTGTGTAC GCTGCCAGTT      180

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TTTCAGAAAG TTGTGCTGAG GAGGTGGGGC CCAGGGAGGT CTCTTCTCTT CTTTGGGGC 240
 TTTTGGCTTT GACTCTCCTT CAGCAGAGAT GAGGGTCATC AGACAGGGTG AGGTAGGTAT 300
 CCGCTCAGCC AGCTGGGTGT TCCCTCGAG 329

(2) INFORMATION FOR SEQ ID NO:807:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 225 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:807:

GAATTCGGCC TTCATGGCCT AAGGTACTTT AATCAGTCTA AATACTTGAA CATTTTATT 60
 TCAGTGTAA AAAATAGACT GAGGCAGAGT GAAGTTATAA ATTAGAATCT AAAAATTAC 120
 CCTTCAACAT TAATATTTTT TAGTGCTCTA ATATAAACA CAGAAAACCT ATCTCAAATA 180
 TAAAGATGA ATATAAAATT ATTAATTAA CAACTGGCGC TCGAG 225

(2) INFORMATION FOR SEQ ID NO:808:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 275 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:808:

GAATTCGGCC TTCATGGCCT AACTTGCTCT TCTGTTTCTA GTTTTATAAA GTGAAAGCTG 60
 CAATCATTGA TTAGAGACAG TTCTACGCTA AAGTCATAAT GACATTTTAT GTAATTTCTT 120
 TTTCTTTTT TTTGAGACAG AGTCTCGCTC TGTGCTCAG GCTGGAGTGC AGTGGAGTGA 180
 TCTCAGCTCA CTGCAACCTC TGCCTCCCAG GTTCAAGCGA TTCTCCTGCC TCAGCCTCCC 240
 GAGTAGCTGG GATTACAGGC CCCACCAAC TCGAG 275

(2) INFORMATION FOR SEQ ID NO:809:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 253 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:809:

GCGATTGAAT TCTAGTTGCC TACCTACCAA ACTACCTACT GAACTTTTAA ATTTGAAGAT 60
 ATTCTTCCTG GACTACTTGT TTATAGTTTA TTAAATGAAC TGCTCTATTT CTAAAACTT 120
 TATTTTAAA GTCCTTTCCC GTTTAGAATG CGGCATACTC TTGCTTGTGG GGTATATATC 180
 TCTGATCGTG ATAACCTACCT ACCGAAAACC TTTTCATGGCT CCTTGCCAAC TACAAAATTG 240
 CGATATCCTC GAG 253

(2) INFORMATION FOR SEQ ID NO:810:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 283 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear.

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:810:

GAATTCGGCC	TTCATGGCCT	AGATTGAATT	CTAGACCTGC	CGACGCGGGG	AGAGACAAAA	60
AAGAGAAAGT	CTTTGAAAAG	CACAAGGAGA	AGAAGGATAA	AGAGTCCACA	AAAAAGTACA	120
AGGACAGGAA	GGACAGAGCC	TCAGTGGACT	CCACGCAAGA	TAAGAAAAAT	AAACAGAAGC	180
TCCCCGAGAA	GGCTGAAAAG	AAGCACGCTG	CCGAAGACAA	GGCTAAAAGC	AAACACAAAG	240
AGAAGTCGGA	CAAAGAACAT	TCCAAGGAGA	GGAAGTCCTC	GAG		283

(2) INFORMATION FOR SEQ ID NO:811:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 316 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:811:

GAATTCGGCC	AAAGAGGCCT	AGGCTTCCAC	CCAGGAAATG	ATCCAGAGCC	TCTTTTATGT	60
TATGTTTTTT	GTTTGTTTCT	TTCAAGACAA	TCGATCAAGC	CAGAGGCATT	CCCCACCCCT	120
CAGCAAGACA	CTTCCAGTA	AGCCCAGCTG	GCCTTCAGAG	AAAGCAAGGC	TCACCTCCAC	180
CCTGCCGGCC	CTGACTGCTT	TGCAGAAACC	TCAAGTCCCA	CCCAAACCCA	AAGGCCTCCT	240
TGAGGATGAG	GCTGATTATG	TGGTCCCCGT	GGAAGATAAT	GATGAAAAC	ATATTTCATCC	300
CACAGAAAAG	CTCGAG					316

(2) INFORMATION FOR SEQ ID NO:812:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 256 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:812:

GGGATGCATA	GATTTAGTTC	TGCCTCACAG	GCAGGTAGCC	TGAGCTCCTA	GGGGGAAGTG	60
TTTTTGCTAA	GTAGGGAATG	AAAAGCATGT	TTATTTAAGC	ACAAAATTAA	ATCTCTCCTA	120
TTTTTATATG	ATTTCCCGTT	GTTTTCTTCC	CTGTAGGGAA	ATCTGCTGTG	ATAGAGAACT	180
GCGTAACAGG	CCTTTTCTGT	GAGCGCTCAC	TCATACATTA	TGCACGACGT	GGCTAAGATC	240
TTTGATGGCA	CTCGAG					256

(2) INFORMATION FOR SEQ ID NO:813:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 317 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double

(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:813:

GCAAGCGGCG	CATGCAGGAG	GAGAAGCAGA	AGTCTGTCAA	CGTCAAGAAG	ACCATCCTGG	60
AGATGCGCTA	CGGGGCTGAT	GTGGATGCCG	GCTCCATTGT	GCACGCCGCC	CAGAAGCTGG	120
GCGAGCCTCC	CGTGCTGCCC	GTATCTCGCA	TGGCCTCCAT	CCCCTCCATG	ATCGGGGAGA	180
AGCTGCCCCAC	CGCCAAGGGG	TTGGAGGCCG	GGCTGGACAC	ACCCAAGGTA	GCCACCAAAG	240
GCAACTATAT	CGAGGTGCGC	ACAGGCGCCG	GCGGGGACGG	TCTGGCTCGG	CCCGAGGATG	300
ACCTCCCGGA	CCTCGAG					317

(2) INFORMATION FOR SEQ ID NO:814:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 370 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:814:

GAATTCGGCC	TTCATGGCCT	ACGAACTCCT	GACCTCAAGT	GATCGGCCTG	CCTCAGCCTC	60
CTAAAGTGCT	GGGATAGCCA	CTGTGCCCAG	CCTAGCCCTT	CTTCAAATGT	TTGGTAAAAT	120
TCAGCATTGA	AGCCATCAGG	TCTTGGGCTT	TTTGCTGGGA	GATTTTTTAT	TATGGCATCA	180
ATCTCATTAC	TTGTTACTGG	CCTGTTTAGG	TTTTCAGTTT	TTTCATGGTT	CAATCTTGGT	240
AGGTTGTTTG	TGTCTAGGAA	TGTATCTGTT	TCTTCTAGGT	TTTCCAGTTT	CTTGGCGTAT	300
AGTTACTCAT	AGTAGCCACT	AATTATCCTT	TGGATTTCTG	CGGTATTGGT	TGTAGTGTCC	360
CCATCTCGAG						370

(2) INFORMATION FOR SEQ ID NO:815:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 382 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:815:

GAATTCGGCC	TTCATGGCCT	AATTGAATTC	TAGACCTGCC	TCAAGCCTAT	CTTTTAGTCT	60
TCCTAGAAGC	ACCGTGTTCT	GTGGAAGTCA	GCATCAGCAG	CTTTGCTGAG	GACTCCCCCA	120
TCTTCCTTTC	CTTCCCCGGA	AAGCACAGAC	CTAAGTGAGT	CTTCACTGGA	TCCCAGCTAA	180
CAGCTTCTGC	CCATTCCTAT	CTTCCACAG	AGCCAGTGGC	AGCCCCAGCT	GCAGCAGCTA	240
CGTGACATGG	GCATCCAGGA	CGATGAGCTG	AGCCTGCGGG	CCCTGCAGGC	CACCGGTGGG	300
GACATCCAAG	CAGCCCTGGA	GCTCATCTTT	GCTGGAGGAG	CCCCATGAAC	TCCCTGCTTC	360
CCCTGAACCC	CCAGCACTCG	AG				382

(2) INFORMATION FOR SEQ ID NO:816:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 274 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double

(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:816:

GCCACGGTGC	TCATTCAGAC	TACCCGTGTG	CCCAAGCAGG	TGGCAGTACC	CGCGACAGAC	60
ACCACTGACA	AGATGCAGAC	CAGCCTGGAT	GAAGTCATGA	AGACCACCAA	GATCATCATT	120
GGCTGCTTTG	TGGCAGTGAC	TCTGCTAGCT	GCCGCCATGT	TGATTGTCTT	CTATAAACTT	180
CGTAAGCGGC	ACCAGCAGCG	GAGTACAGTC	ACAGCCGCC	GGACTGTTGA	GATAATCCAG	240
GTGGACGAAG	ACATCCCAGC	TGCAACATCT	CGAG			274

(2) INFORMATION FOR SEQ ID NO:817:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 356 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:817:

GAATTCGGCC	TTCATGGCCT	ACAAAAATAC	ACCTGTGGTC	CCAGCTGCTC	GGGAGGCTGA	60
NTTACGAGAG	TCCCTTGAAC	CTGGGAGGCG	GAGGTTGCAG	TGAGCTGAAA	TCATGCCACT	120
GCACTCCAGC	CTGGGCAACA	GAGCGAGACT	CTGTTNAAAA	AAAAAAAAAT	AGCGAGAGAT	180
CGAGAGAGAG	TGCACGTGAG	AAGACTAGTA	GTTGCTATGG	ACTGGGGGAG	AAGGAACGGG	240
TTACAGGGTT	TCTTTTGGGG	ATAACGAAAA	TGTTCTAAAA	CTGGACTGTG	GTGATAACTG	300
CACAACTCTG	TGAATGTACT	AAAAACTACT	GAAGTGGCCG	GGCGCGGCAG	CTCGAG	356

(2) INFORMATION FOR SEQ ID NO:818:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 184 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:818:

GAATTCGGCC	TTCATGGCCT	AGGCAGGGTG	TCACTTATT	TAATTCTAAA	AATAGTATAT	60
TCATAGAGAT	ACTATCATCC	TCATTTTATA	TATTCAAAAA	ATTCAAAGAA	GTAAAGTAAA	120
TTGCCAAAAG	TCACCCAGAT	AATAAGTAGA	AAAGATGGTA	ATGAAATCCA	GGTTGGCCTT	180
CGAG						184

(2) INFORMATION FOR SEQ ID NO:819:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 349 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:819:

GAATTCGGCC	TTCATGGCCT	ACAACAACAA	CAACAAAAAA	ACATCATCCG	GGGAAGCTTT	60
TCAATATCCT	GACGTTGGGT	CTCTCCAGTG	TAGATGGAAA	TATGGAATTG	GGAATAGACA	120
TCGATATTTT	TGGAGGTCCC	CAGGGGTAC	CAATGTGCAG	ACAGGTTTGG	GAACCACTGC	180
ATTAGGCATT	TTACATTTAT	TTAGGGCTTT	CACTGGATT	GTCACCCCAT	ACTTTCATAA	240
TCCATTTTTT	CTGATTTTTT	TTCTGGTTTT	TGGTGAGGGT	ATAGTTGGGA	TGGGGTTTTT	300
TTTTTTGTCC	TCCCACCGCT	CGCCCCCATC	CAGTGTGGAC	GTACTCGAG		349

(2) INFORMATION FOR SEQ ID NO:820:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 167 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:820:

GAATTCGGCC	TTCATGGCCT	ACTCTTTCCT	TGAAGAATTT	GTTGAAGACT	TCAGAAGTGA	60
TGCTGGCTGC	TTTCTTCATT	AGGTTGAGCT	CCCCATCCTC	CTTTACAGCG	ATGGTATATG	120
CCACAACATGC	ACTGATATCT	ATTTGTCAA	AGCCTTCAGG	TCTCGAG		167

(2) INFORMATION FOR SEQ ID NO:821:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 733 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:821:

GAATTCGGCC	AAAGAGGCCT	AGCGAAATAA	AACAAGGGAG	TCAGCAAAAC	CAGAAATTTT	60
AGCAATGTCA	GCTCATGACA	AGGCTGCATT	ATCAGAAGAG	GAAGTGGAGA	GGAAGTCGAA	120
ATCTATCATT	GATGAATTTT	TACACATTAA	TGATTTTAAG	GAAGCCATGC	AGTGTGTGGA	180
AGAGCTGAAT	GCCCAGGGCC	TACTACATGT	TTTTGTGAGA	GTGGGAGTGG	AGTCCACCCT	240
GGAAAGGAGC	CAGATCACCA	GGGATCACAT	GGGCCAACTA	CTCTATCAGC	TGGTACAGTC	300
AGAAAACTC	AGCAAACAGG	ACTTTTTCAA	AGGTTTTTCA	GAAACTTTGG	AATTGGCAGA	360
TGACATGGCC	ATTGATATTC	CCCATATTTG	GTTGTACCTT	GCTGAACTGG	TGACCCCAT	420
GTTAAAGAA	GGTGAATCT	CCATGAGAGA	ACTTACCATA	GAATTTAGCA	AACCTTTACT	480
TCCTGTTGGA	AGAGCTGGGG	TCTTGCTATC	TGAAATATTG	CACCTACTAT	GCAAACAAAT	540
GAGCCATAAG	AAAGTGGGAG	CCTTATGGAG	GGAGGCTGAC	CTCAGCTGGA	AGGACTTTTT	600
ACCAGAAGGA	GAAGATGTAC	ATAATTTTCT	TTTGGAGCAG	AAGTTGGACT	TCATAGAGTC	660
TGACAGTCCC	TGTTCTCTG	AAGCACTTTC	AAAGAAAGAA	CTGTCTGCCG	AAGAGCTGTA	720
TAAGCGACTC	GAG					733

(2) INFORMATION FOR SEQ ID NO:822:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 512 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:822:

TGCCAGATAG	TTCTGCAGAA	GAAATCACTG	TTTGTCTCTGA	GACACAGGTA	AGTTCCTCTG	60
AAACTTTTGA	CCTTGAAAGA	GAAGTCTCTC	CAGGTAGCAG	AGATATCTTG	GATGGAGTCA	120
GAATAATAAT	GGCAGATAAG	GAGGTGGTA	ACAAGGAAGA	TGCTGAGAAG	GAAGTAGCTA	180
TTTCTACCTT	CTCATCCAGT	AACCAGGTAT	CCTGCCCCGCT	ATGTGACCAA	TGCTTTCCAC	240
CCACAAAGAT	TGAACGACAT	GCCATGTACT	GCAATGGTCT	GATGGAGGAA	GATACAGTAT	300
TGACTCGGAG	ACAAAAAGAG	GCCAAGACCA	AGAGTGACAG	TGGGACAGCT	GCCCAGACTT	360
CTCTAGACAT	TGACAAGAAT	GAGAAGTGTT	ACCTCTGTAA	ATCCCTGGTC	CCATTTAGAG	420
AGTATCAGTG	TCATGTGGAC	TCCTGTCTCC	AGCTTGCAAA	GGCTGACCAA	GGAGATGGAC	480
CTGAAGGGAG	TGAAGAGCA	CGTTCGCTCG	AG			512

(2) INFORMATION FOR SEQ ID NO:823:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 423 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:823:

GAATTCGGGC	CTTCATGGCC	TACTCTCATC	TGTATCTGTT	TCCTCTAACT	TTACTGAAAA	60
GATAGAATTC	ATTAAGCATG	AATTCTACCA	TCTTCTCCCT	ACTACAGCTC	TGCAAAAAG	120
ATGTTGCTCT	CTGAGCCCAA	CTCTCCCTCA	GTCCCCAGGA	TTCTGTCCCT	GTCCACCTTT	180
AATCTTTTCC	TTTCTGATT	TTATGTTATA	AGTTATTTAG	ATTTCGATGA	GAGATAATCG	240
TACCTAGAGT	ATGGGAGAAC	TATTTAAGGT	TTACAGGTTG	GGTGGAACCC	TTGTATATAC	300
TAGATGGTAC	TGTGAGGGCT	TGCCCACTG	TCAGCCTTCA	TCTGAACAGA	GCAGAAAGTG	360
TTCTGTCATG	TTCACCAAGC	CCTGCTGGAC	TGTATCACTT	TTCTCTGTGG	GCCAAAACCTC	420
GAG						423

(2) INFORMATION FOR SEQ ID NO:824:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 353 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:824:

GAATTCGGCC	TTTCATGGCCT	AGCGGCCTCA	GATGAATGCG	GCTGTTAAGA	CCTGCAATAA	60
TCCAGAATGG	CTACTCTGAT	CTATGTTGAT	AAGGAAAATG	GAGAACCAGG	CACCCGTGTG	120
GTTGCTAAGG	ATGGGCTGAA	GCTGGGGTCT	GGACCTTCAA	TCAAAGCCTT	AGATGGGAGA	180
TCTCAAGTTT	CAACACCACG	TTTTGGCAAA	ACGTTGATG	CCCCACCAGC	CTTACCTAAA	240
GCTACTAGAA	AGGCTTTGGG	AACTGTCAAC	AGAGCTACAG	AAAAGTCTGT	AAAGACCAAG	300
GGACCCCTCA	AACAAAAACA	GCCAAGCTTT	TCTGCCAAAA	AGATGATCTC	GAG	353

(2) INFORMATION FOR SEQ ID NO:825:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 506 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:825:

GAATTCGGCC	AAAGAGGCCT	AGGAGTAAGG	ATGCAGAAAT	GATTGCAGCA	TATTTCATTG	60
TCTACGCAAG	GATGTTCTTC	GGAAATGGAG	GCGACATTGC	TGCCTGCTTT	TTTGAGGGAA	120
TTGATGATGT	TCACTGGAAG	GAAAATGGGA	CATTAGTTCA	AGTAGCAACT	ATATCAGGAA	180
ACATGTTCAA	CCAAATGGCA	AAGTGGGTGA	AACAGGACAA	TGAAACAGGA	ATTATTATG	240
AGACATGGAA	TGTAAAAGCC	AGCCCAGAAA	AGGGGGCAGA	GACATGGTTT	GATTCTACG	300
ACTGTTCCAA	ATTGTGTGTT	AGGACCTTTA	ACAAGTTGGC	TGAATTGGA	GCAGAGTTCA	360
AGAACATAGA	AACCAACTAT	ACAAGAATAT	TTCTTTACAG	TGGAGAACCT	ACTTATCTGG	420
GAAATGAAAC	ATCTGTTTTT	GGGCCAACAG	GAAACAAGAC	TCTTGGTTTA	GCCATAAAAA	480
GATTTTATTA	CCCCTTCAAC	CTCGAG				506

(2) INFORMATION FOR SEQ ID NO:826:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 337 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:826:

GATGGAGCAG	TTCCAGAAGG	AGAAGGAGGA	ACTGGACAGG	GGCTGCCGCG	AGTGCAAGCG	60
CAAGGTGGCC	GAGTGCCAGA	GGAACTGAA	GGAGCTGGAG	GTGGCCGAGG	GCGGCAAGGC	120
AGAGCTGGAG	CGCCTGCAGG	CCGAGGCACA	GCAGCTGCCG	AAGGAGGAGC	GGAGCTGGGA	180
GCAGAAGCTG	GAGGAGATGC	GCAAGAAGGA	GAAGAGCATG	CCCTGGAACG	TGGACACGCT	240
CAGCAAAGAC	GGCTTCAGCA	AGAGCATGGT	AAATACCAAG	CCCGAGAAGA	CGGAGGAGGA	300
CTCAGAGGAG	GTGAGGGAGC	AGAAACACAA	GCTCGAG			337

(2) INFORMATION FOR SEQ ID NO:827:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 216 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:827:

GAATTCGGCC	AAAGAGGCCT	ACAGGTACAG	AATCATATGA	ATGTTTCTTT	CTTTCTTTCT	60
TTTCTTTCCT	TCTTTCCTTC	TTTCTTTCTT	TCTTTTTTTG	AGACAGAGTC	TTGTTCTGTT	120
GCCAGACTGG	AGTGCAGTGA	CTCAATCTCA	GCTCACTGCA	ACCTCCACCT	CCCAGGTTCA	180
AGCAATTGTC	CTCCCTCAGC	GAGGACCTGC	CTCGAG			216

(2) INFORMATION FOR SEQ ID NO:828:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 386 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:828:

GAATTCGGCC	AAAGAGGCCT	AAAAAAAAGA	AGATGGGTTT	TTTAAGTCCA	ATATATGTTA	60
TTTCTTCTT	TTTGGAGTC	AAAGTACATT	GCCAATATGA	AACTTATCAG	TGGGATGAAG	120
ACTATGACCA	AGAGCCAGAT	GATGATTACC	AAACAGGATT	CCCATTTCGT	CAAAATGTAG	180
ACTACGGAGT	TCCTTTTCAT	CAGTATACTT	TAGGCTGTGT	CAGTGAATGC	TTCTGTCCAA	240
CTAACTTTCC	ATCATCAATG	TACTGTGATA	ATCGCAAAC	CAAGACTATC	CCAAATATTC	300
CGATGCACAT	TCAGCAACTC	TACCTTCAGT	TCAATGAAAT	TGAGGCTGTG	ACTGCAAATT	360
CATTCATCAA	TGCAACTCAT	CTCGAG				386

(2) INFORMATION FOR SEQ ID NO:829:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 293 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:829:

GAATTCGGCC	AAAGAGGCCT	AGCTGAATCC	TAGATTTTCAG	CTTCTCACTC	AGAATTTAAG	60
CTGTTTTTCAG	TACCAGAAAT	ATTTAAGACT	GTTAGTTTAA	CTTCTAAGAA	TAGCAGATAA	120
AGCGTATAGG	TGTTTTGAGA	TAACCGTATT	CATAGGAAAA	ACAAACATAA	AACTTTCATA	180
ATTTTGGGAA	GAGTTACACA	CAAAAATATC	ATCATTGAAT	AATTAGTACA	ACAAAATGTC	240
ATTTGTTTGT	CCTAAAGGTT	GAAATGAACA	GAATCATGAT	GGGAATACTC	GAG	293

(2) INFORMATION FOR SEQ ID NO:830:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 146 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:830:

GAATTCGGCC	AAAGAGGCCT	AATTGAATTC	TAGACCTGCC	TATGTCCTAT	TCCCTGTGTC	60
CTGCAAGACC	CCCTTTGGTT	TGGTTTTCTT	TTCTTTTCTT	TTTTTCTTTT	TTGAGACTGC	120
GTCTTGCTCT	GTCTCCAGG	CTCGAG				146

(2) INFORMATION FOR SEQ ID NO:831:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 158 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:831:

GCGATTGAAT	TCTAGACCTG	CCTCTCATCC	ACTATTGTCT	TTCCCCAATT	TTTTTCTAGC	60
CTTATCTTCC	AGAATTCCTC	TCAGACATAG	GTGGCCCTGG	TTGCTTGATC	CTGTCTCTAA	120

GTTGGTCTTT CATGTTTTCT CTCCTCAGAT TGCTCGAG

158

(2) INFORMATION FOR SEQ ID NO:832:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 317 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:832:

GAATTCGGCC TTCATGGCCT AGCTGATTTA AATCTAAAA CTGGATAAGA AGCTGTGGCT	60
TGTAATTAAA AATAGACCTT TATTCAC TAG ACCTACAGTT TGCTTTTTTC ATATGTTAAG	120
AAAAGTTTAA TATCCTGCT CTCTATTTC GTTCTAGGGG CACCACTATC AGTTAACCCT	180
AAAGATTCT GTGGGTGAAA CCATTGTGAT TACCATCTTG CTCTGCTGCC AGTTATGGTA	240
ACCAAACCT CTTTGTCTT GGATGCTAAA TCTGTCCACT TGTGCCTTAA CTACATCCTA	300
ACTCCCGTCA ACTCGAG	317

(2) INFORMATION FOR SEQ ID NO:833:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 339 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:833:

GAATTCGGCC TTCATGGCCT AGCCCCCGGA GCCCACCACA GTCCCCAGAG TGTGATAAAA	60
ACAATTTTAA TACTTCTTAT CTCTTTCTAG TAGTCTACAT CCCATTCCCA GTCTTTCCAA	120
TCATAAAAAAT TTGTAGTTTA TTTAGTTCAC ACTTGAACGT CCTATGAAAC TGTTTAAAC	180
CTTTTACCTA TCTTGTCTT TGTCATTATT CTTAAGCCAT TGATACAGAA ATCAGAACCA	240
AATTTAATAT TGTGTGGGT ATGAGACAGT TTCTGTCTAG TTTTAATTT TTCCTTAAAG	300
TTTACTATG TACTTCATAT ATACCGGGCA CTTCTCGAG	339

(2) INFORMATION FOR SEQ ID NO:834:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 396 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:834:

GAATTCGGCC TCATGGCCTA TGACTTTTAA GTTCTTATT AACTGAGAA ACACCTAACT	60
ATCCTAATAG AATTAAATTT CCCTAAGTTA TAAGACACTT GAATTTTTTA AAAAGAGATA	120
ATTAAATTC TCCTATATTT TATTTCAATT ATTTTTCAG TCATGCTCCT TCTGTATCTC	180
CTATATTTTA TTATATTACT TACATGGCTT TATTTTACA ATAACCTTTT TTTCCCTTC	240
TTTTATTAT TTGTTTATT TTGGAAACAG AGTTTCCTTA TGCTGCCCAC GCTGGTCTCTG	300
AGCTCAAGCA ATCTTCACGC CTCAGCTCC CAAAATTATA GGACTACAGG CATGAGCCAC	360
TGTGCCTGGC CTAAGCCACT GCACCCGGCG CTCGAG	396

(2) INFORMATION FOR SEQ ID NO:835:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 294 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:835:

GAATTCGGCC	TTCATGGCCT	ACTTTTACTC	ATGCATAATT	TTGTAAAATC	CTACATTGGT	60
CATTTGAAA	ATATGATT	CTGAGTAAT	ACAACTCTTC	CAAATGTTGA	ATGTTTCATT	120
CTACAATATC	AGAAACTCAA	TTTGTTAATG	TTACTACTAG	TCTCATCAGA	AATGTCCTTA	180
AGTATTTGTT	AACTGGCAAA	CTCATAGTGA	CGACTACAGG	CTTTCCAGAA	TTTTCATTTT	240
CATTTGAAGT	CTGAATTTTA	TCAACTATAA	ATACTGTCAG	TTGTTTCCCT	CGAG	294

(2) INFORMATION FOR SEQ ID NO:836:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 352 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:836:

GAATTCGGCC	TTCATGGCCT	ACTCTGATAC	TAAGTGTAGT	CTACATTTAT	ACATTGTGTC	60
TGAATGCTGG	TTTTGTGGCT	TCTAGAGCTC	CCTTTTCTC	TCTCCTTTT	TATCCTGTCT	120
TTTGCTGCTG	CTTTCCACCT	TCTGTCCAGC	TCCATCTTCA	GACAGCTCCC	TGTATAACGC	180
TCCACTTCCT	GAGTATTCCA	GTTGCCAGCC	TCCTTCAGCA	CCTCCTCCAT	CATACGCTAA	240
AGTCATCTCA	GCTCCAGTGT	CAGATGCCAC	TCCTGATTAT	GCTGTAGTGA	CTGCTTTGCC	300
ACCTACTTCC	ACACCCCTA	CACCACCACT	GCGACACCCA	GCGACACTCG	AG	352

(2) INFORMATION FOR SEQ ID NO:837:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 355 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:837:

GAATTCGGCC	TTCATGGCCT	ACCGGACCTT	GAAAATGGAA	TGTTCAGAAA	CACATGTGCA	60
AGGGAGCTGT	GCCAAGCTCA	TGTTGCGAAC	AGGCCTCCTG	ATGAAGCTTC	TCAGCGAGCA	120
GCAGGAAGCA	AAGGCATTGA	ATGTAGAATG	GGATACGGAC	CAACAAAAAA	CAAATTATAT	180
TAATGAGAAC	ATGGAACAGA	ATGAACAGAA	AGAGCAGAAG	TCAAGTGAGC	TCATGAAAGA	240
AGTTCCAGGA	GATGACTATA	AGAACAAACT	CATCTTCGCA	ATATCTGTGA	CTGTAATACT	300
AATAATTTTG	ATTATAATTT	TTGTCTTAT	AGAGGTGAAT	TCACATATGC	TCGAG	355

(2) INFORMATION FOR SEQ ID NO:838:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 540 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:838:

GAATTCGGCC	TTCATGGCCT	AAAAAATCTA	GTTGAGAAAA	AGAAAGAAAC	CAAGAAGGCT	60
AATCACAAGG	GTTCTGAAAA	TAAACTGAT	TTAGATAATT	CTATAGGAAT	TAAAAAAATG	120
AAAACCTCAT	GTAAATTAA	GATAGATTCA	AACATAAGTC	CGAAGAAGGA	TAGCAAAGAA	180
TTTACACAAA	AAAATAAGAA	AGAGAAAAAA	AACATTGTTC	AACATACTAC	AGACTCTTCT	240
CTCGAAGAAA	AACAAAGGAC	ATTAGACTCA	GGCACCTCTG	AAATTGTGAA	ATCTCCCAGA	300
ATCGAGTGTT	CTAAGACAAG	AAGAGAAATG	CAATCAGTGG	TTCAACTCAT	AATGACAAGA	360
GACAGTGATG	GTTATGAAAA	CTCAACAGAT	GGTGAAATGT	GTGACAAAGA	TGCTCTGGAG	420
GAAGATTCAG	AAAGCGTTAG	TGAAATAGGA	AGTGATGAGG	AATCTGAAAA	TGAAATTACA	480
AGTGTGGTA	GAGCTTCAGG	TGATGACGAT	GGAAGTGAAG	ATGATGAAGA	GAAGCTCGAG	540

(2) INFORMATION FOR SEQ ID NO:839:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 539 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:839:

GAATTCGGCC	TTCATGGCCT	AGCATTTTCAT	CTCTAAATTG	GGGAGAATAG	AAGCATCTAC	60
TTCATGTAGT	AGCCAGGATT	AGAAGAGGGA	GGAATAACTG	GGCCCTGGAT	AGAATGTGAT	120
GAATGTATAT	TCTTAATGAG	AAGTGGAAT	AATTTGTGGT	TGAGAGCTGT	GCCTCAGATC	180
AGAGTGACAG	GATACATGGC	TAGGCTATAT	TTTCCAGCAG	ATTAAGAGCT	GCAGCCCAAG	240
ACTCTGAAAT	ATGAAGAAAA	AAGGAGAAGA	TGACAGCATA	TCTTTTAA	GAAATATTTT	300
CCAGCCAAAT	GGTGCAGCAG	AGGACTTCCA	GGAATTTGTT	CTGTCTCTGT	ATCAAAGGTG	360
AAGAGTTCGT	AGCCTTCAAG	GAAACAAGAA	ACCATGGGAT	GGAGTGAAGG	AAGGTGGCCT	420
GGAACAGCT	GCTGAGCCTC	TCTGAGCCCC	AGTTTCCTCG	TCTCTAAAT	GGGGCTGATC	480
TCCTCTCCCT	CAGACTGTTG	TTGCAGGAAT	TAAACAGGT	GTTGAGTGGG	CTGCTCGAG	539

(2) INFORMATION FOR SEQ ID NO:840:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 297 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:840:

TTCCACAGCT	CTGATATTCA	GTAACCCATG	TGGAGAACAA	AAGGATTTTG	CTCCATGAAG	60
TCTAATTGCC	TGCTGAATAA	ATAAATAAAT	AGATGAAGCA	CTGCATGCAT	TAAATGAAAG	120
TAAATATTGA	CCCTGCCACC	ATATGTTTGC	TGGGGTGTCTG	GCTGAAGTGT	GCTGGCAGGT	180
CCAATCAGTC	AGAGTCTGCC	AGCCCAGCAA	GCAGGAGAGA	CAGGAATATC	AAAAAGGCGC	240
TCCTGCTTGT	GCCTTAATCT	TTGTCCAACC	CCCAATTCCT	CCACCACAGG	CCTCGAG	297

(2) INFORMATION FOR SEQ ID NO:841:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 366 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:841:

GAATTCGGCC	TTCATGGCCT	ACCTTATTAG	TGATTGGCGA	TTCAGGCCAT	GTCATAGGGC	60
CTTTCAGACA	AAAGGTTCTT	ATCCAGTCA	GCTGGCCAAA	ACATTAACCT	TGGATTCTT	120
ACCCTGCTAC	AGCATCTTCT	AGAAAGGCAG	CAAGATAATA	TTGTGGCAGT	GCACAGATAA	180
CATCAGGGTA	GACTTGACTG	GAGAAAACCA	AATTCTGCGC	TTGCTCCTGT	GTGCCCCCAT	240
CCAGCTGTGC	ATGCACACAC	AGGACACCTT	TCTAGTATGA	AGAACTTGCA	TCATGTCTGC	300
CCTCTATTGA	GCACCCCTT	CTAGAAATAC	TTCCAAGTAT	TAGCATGTGA	ACTGTTGACT	360
CTCGAG						366

(2) INFORMATION FOR SEQ ID NO:842:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 190 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:842:

GCGATTGAAT	TCTAGACCTG	CCTCGAGCTG	ACTTATGAAT	TCTTTCTGTG	TGATCGTAAA	60
AGTGCAGAGT	TTATTGCAAA	GAGAATCTTC	ATCTGAATCC	TCAGCCTGGG	AATCTTCCTC	120
TTCCACCGCC	AACTCCTCCA	CCAGTCTGA	GTCTACTTCA	ATGGCCCCGT	CTTCCCCATC	180
CGCACTCGAG						190

(2) INFORMATION FOR SEQ ID NO:843:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 627 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:843:

GAATTCGGGC	TTCATGGCCT	AAGCTCCGCG	AGCCCCCTAC	AACTCGTTTC	CTTCCGTTC	60
CCTTCGCAGG	GCGGCGACTG	GCGGCGCGAT	GGACCTGACC	GGGCTCCTGC	TGGACGAAGA	120
AGGCACCTTC	TCCCTCGCGG	GCTTCCAGGA	CTTCACGTTT	CTCCCAGGAC	ACCAGAAGCT	180
GAGTGCCCGG	ATCCGAAGGA	GGCTCTACTA	TGGCTGGGAT	TGGGAAGCCG	ACTGTAGCCT	240
GGAGGAGCTC	TCCAGCCCGG	TGGCAGACAT	TGCTGTGCGA	CTGCTCCAGA	AGGCAGCCCC	300
CAGCCCTATT	CGCCGACTCC	AGAAGAAATA	CGTAGCTCAT	GTGTCCCGGG	AGGCATGCAT	360
CTCCCCATGT	GCTATGATGC	TGGCTCTGGT	GTACATTGAA	CGGCTCCGGC	ACCGAAACCC	420
AGACTACTTG	CAGCATGTGT	CATCCTCTGA	CTTGTTCTCT	ATCTCCATGA	TGGTGGCCAG	480
TAAGTACCTC	TATGATGAAG	GGGAGGAGGA	GGAGGTCTTC	AACGACGAAT	GGGGAGCTGC	540
TGGGGGTGTG	GCCGTGCCCA	CTCTCAATGC	CTTGGAGAGG	GGCTTCCTGA	GTGCCATGGA	600

TTGGCATCTC TACACTGAAC GCTCGAG

627

(2) INFORMATION FOR SEQ ID NO:844:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 305 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:844:

GAATTCGGCC	TTCATGGCCT	ACCTGAGCTG	CCGAAGCCGC	CGTCTGCTC	TCCCGCGTGG	60
GCTTCTCTAA	TTCCATTGTT	TTTTTTAGAT	TCTCTCGGGC	CTAGCCGTCC	TGGAACCCG	120
ATATTCGGGC	TGGGCGGTTT	CGCGGCCTGG	GCCTAGGGGC	TTAACAGTAG	CAACAGAAGC	180
GGCGGCGGCG	GCAGCAGCAG	CAGCAGCAAT	CTCTCCCGA	ACACGAGCAC	CACAGGCGCC	240
CGAAGGCCGG	AACAGGCGTT	TAGAGAAAAT	GGCAGACGAT	ATTGATATTG	AAGCTCTAGC	300
TCGAG						305

(2) INFORMATION FOR SEQ ID NO:845:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 409 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:845:

GAATTCGGCC	TTCATGGCCT	ACCAGAAAAA	ACTTACATTG	AAGAGAGGAT	TCCTTGTTTT	60
GACTATGTGT	GTTTCTGCCG	TCTTAGGCAG	CCAACGTATT	GGTTTACATG	GATCTGGAGG	120
ATTATGCACA	CTAGTGTTGA	GTTTCATTGC	AGGGACAAAA	TGGTCCCAAG	AAAAGATGAA	180
AGTCCAAAG	ATTATTACGA	CTGTATGGGA	TATTTTCAA	CCACTTCTTT	TGGTTTAGT	240
TGGAGCAGAA	GTATCTGTTT	CATCGCTTGA	ATCAAATATT	GTTGGCATAT	CTGTTGCCAC	300
TCTAAGTTTG	GCATTATGTG	TTCGAATTTT	AACCACATAT	CTATTGATGT	GCTTTGCTGG	360
TTTTAGTTTT	AAGGAGAAAA	TATTTATTGC	TTTAGCATGC	ATGCTCGAG		409

(2) INFORMATION FOR SEQ ID NO:846:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 370 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:846:

GAATTCGGCC	TTCATGGCCT	AGGCACGGTA	CATACGATTA	TTATAAACAT	CAGCTGCGGT	60
TCTGGGAGTG	AGCTTGTGTC	GTGTTAGTGC	CATCTCCCTG	ACAAATCTGA	CCTGTACCCA	120
CATCTCAGGC	TGGGAAGGAG	TAGCTGGGCC	TCCCTTTAAT	GCAGCGGCAC	TGGTTTGGGT	180
CACAAGAGCT	GGTTTGATCA	ACCCCTGACT	CCCCCTGGCG	GGAGGTGCTC	GTCACATCTG	240
GGAGCCTGAG	CAGAGGTGCC	GGGGGCTTGG	AAGCTGGAGA	AATGATGGAT	CTTTCTCCAG	300
GAGAAACAAT	TCTTATCTTC	ACATCNGCCC	CGTGCTCCAA	ATGAAGAGCG	CGTTTGCATA	360

GCTGCTCGAG

370

(2) INFORMATION FOR SEQ ID NO:847:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 504 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:847:

GAATTCGGCC	TTCATGGCCT	ACGCGCGGCC	GAGCGGAGGC	GGAGTCGGCG	CCGAGAACAT	60
GGCTGGAGGC	AAAGCTGGAA	AGGACAGTGG	GAAGGCCAAG	GCTAAGGCAG	TATCTCGCTC	120
ACAGAGAGCT	GGGCTACAGT	TTCCTGTGGG	CCGCATCCAC	AGACACTTGA	AGACTCGCAC	180
CACAAGCCAT	GGAAGGGTGG	GTGCCACTGC	TGCCGTGTAC	AGTGCTGCCA	TTCTGGAGTA	240
CCTCACTGCA	GAGGTGCTGG	AGCTGCGAGG	TAATGCTTCT	AAGGATCTCA	AAGTAAAGCG	300
TATCACTCCG	CGTCACTTGC	AGCTTGCAAT	CCGTGGTGAT	GAAGAGTTGG	ATTCTCTTAT	360
CAAGGCTACC	ATAGCTGGGG	GTGGTGTGAT	CCCTCACATC	CACAAATCTC	TGATTGGAAA	420
GAAGGGACAG	CAGAAAAC TG	CTTAGAGGGA	TGCTTTAACC	AACCTCTTCC	TTCCCCGTCA	480
TTGTACTGTA	ACTGGGACCT	CGAG				504

(2) INFORMATION FOR SEQ ID NO:848:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 436 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:848:

GAATTCGGCC	TTCATGGCCT	AAACAAGCAG	AGGGACTCCC	CAGATAGCTT	CATACCCAGT	60
TTAGCTTTAT	AACAAGTGTA	GTTT TAGGCT	CTGTCTTGGC	ATACTTGAGA	GCACAATGGC	120
TGCTTCAAAA	CAGGCATT TG	AAC TCGCTGT	TTAATCAAAT	TCTTCTTTAA	TCTAAAGTGA	180
GTTTCTCATA	GAGAGCATAT	ACACTTAACC	CTTGAACAAT	GTAGGGGTTG	GGGTGGGGAG	240
TCAACCCCT	GTGAAGTAAA	AATTTGCTAA	TAAC TTTTGA	CTCCCCCAGA	ACTTAACTAT	300
AAATAGCCTA	CTATTGATTG	GAAGTGTTAC	CAACAGCATA	CACAGTTAAC	ATATATTTTG	360
TATGTAATAT	GTGTTATCCA	CTATATTCTT	ACAATAAAGT	TAGCAAAAGA	AAAAAATGTT	420
ATTAGGAATC	CTCGAG					436

(2) INFORMATION FOR SEQ ID NO:849:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 502 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:849:

GAATTCGGCC	TTCATGGCCT	ACATGAGCCC	AGGAGTTGAA	GGCTATAGCC	TGGGTGACAC	60
AACAAGGCC	CATCTCTAAA	AAATATATAA	ATAAATAAAG	TTAAGGATGC	TGCGTGGTTT	120

ATATGTTTCAG AAAGAGATTG AGGTAATAAA AGAGTTTTTG GCCAGGCTCT GGCTTACACC 180
 TCGGCCTCCC AGAGTGCTGG GATTACAGGC ATGAGCCACC GCGCCAGCC GGAAGTAGGT 240
 TTTTGAAGA GTCAGCTGAA AACAACTGTT GCCGTATTTC GAATTTAAAA TTTTAATTG 300
 AAAATATTAT AACTGAGAAA TTATTGTATA TATTTATGGT ATACAGCGTG ATGTTATGAT 360
 ACATGTATAC AATGCAGAAT GATTAAATCA AGCTATTTAA CATAGCTGTC ACCTCAAATA 420
 CTATTTTGT GGTGAGAAAT TTGAAATTTA TTATCTCAGG AATTTTGAAA TGTACAATAC 480
 ATTATTATTA ACTGTTCTCG AG 502

(2) INFORMATION FOR SEQ ID NO:850:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 291 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:850:

GAATTCGGCC TTCATGGCCT AGATAAAAAG AAACAAAAAA GAGAAGATAT GATAAGAGAA 60
 CAGAAGATAT ACCATAAATA TTTGGCACAG AGACGTGAGG AAGAAAAAGC TCAGGAGAAA 120
 GAATTTGACA GAATATTAGA GGAAGACAAG GCAAAGAAGT TGGCTGAGAA GGACAAGGAG 180
 CTGAGACTTG AAAAGGAGGC AAGGAGACAG CTTGTGGATG AGGTCATGTG TACAAGAAAA 240
 CTTCAAGTTC AAGAAAAGTT GCAACGAGAA GCTAAAGAAC AGGAAGCTCGA G 291

(2) INFORMATION FOR SEQ ID NO:851:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 311 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:851:

GGTCTGTAT TCTGTTGGTT GGAGTGTCT ACTATTGTTG GGTGGAGTGT TCTATCTTCT 60
 GTGGGTGGA GTGTTCTGCT GTTGTGGGT GGCCTGTGT ATATTCTGTT GTTGGGTGGC 120
 GTGTTGATA TTCTGTTGTT GGGTGGCGTG TTCTATCTTC TGTGTTGGG TGGATGGATT 180
 GTTCTGTATT CTGTTGGGTG GCATGTTCTA TCTTCTGTTT TTGGGTGGAG CGTCTATCT 240
 TCTGTTGGGT GGCGATTCT ATATTCTGTT GTTGGGTGGC GTGTTCTGTA TTCTGTTGTG 300
 GTGGCTCGA G 311

(2) INFORMATION FOR SEQ ID NO:852:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 532 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:852:

GAATTCGGCC CTTATGGCC TAGTCTCATC TCAGAGTACT CAGAGAACT ATTTTTTAAT 60
 CTCTAGATAT CAATCAATGA ATATTTATTA TAAATACCT GCTATGTGCC AGATGGTGT 120

AATTATAAGT	TGTTCTCTT	TTTGTCTGTC	TACTTAGGCT	TTTATCATTT	TGTCCTATCA	180
TTAGGGAAGT	GGCTCCNNNN	CTTACAGCTA	ATTTTTTTTT	CAATTTACTA	ATGACTTTTT	240
GTGGAGGTGG	GGATCTCTTC	TGTTCAACAT	TTTCTATGAT	TCATCTCAAT	CCTCCAGTGA	300
TTATTAAAAA	ACAGTTGCAG	TAAGTTCAGT	CATAGGGGCA	CTGGAATGAG	TCCTTAAAAAC	360
TTTATGCTGC	TGCTTTTGCA	ATGATGGATT	GCCTGAGAAT	TAAGGAAAGA	TAAGTACTCT	420
CTTGGTCACT	GTATTTCCAA	TCAACCATAT	CCTCCCAGAA	TATGATTCT	TCCCTCAGGC	480
ATTTTAGAAA	AGAGACAAGA	GACAGATTTT	TTTTTTCAGG	CAATGACTCG	AG	532

(2) INFORMATION FOR SEQ ID NO:853:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 415 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:853:

GAATTCGGCC	TTCATGGCCT	ACTTTTTGAT	AAGCAACTAG	TGGTCTCATT	ATCAGAGGTC	60
CCTGAGGGGC	CCTACAGGCC	CCCCCAGGTT	CTGCCCCCAA	GATTCTAAGA	GAGACCTTGT	120
GCTAGGGCTC	TAGTCTTGAT	GTTCTTTGCA	TTGTTTGGAT	ATGAAGCCCA	GGATATGTGG	180
GCACAATAAG	GTAAATCATG	AGATGTGAAG	GAGAATGAAG	ATCAGGCCAG	AGGTCACCAT	240
TCATTGAAGA	GCCAGAGAAA	AAGAAAATTA	GTGCACAGAT	TTGTGTAGAT	TTACAGAGAA	300
CTTCTATTTG	CTGCAAGAAC	TTCATCAGGC	GCTGCACCAT	GCCTGATTG	GAAAGGAGCT	360
TCTTTGGGGC	CTGATAGAAC	TGAATTAATA	TGAAGAAATT	GAAGTGGCTC	TCGAG	415

(2) INFORMATION FOR SEQ ID NO:854:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 324 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:854:

GAATTCGGCC	TTCATGGCCT	AGTAAAATTA	GCTGAAAAAT	AATTTTCCAA	TGCAAATACT	60
AATGAGGGTT	ATATGACCGT	TGTCCAAAGC	ATTTGCAGTG	CTGCATGACA	TTTGTCTTAA	120
AACCTGACTC	TAAAAACATT	CCTTGTGAAA	ATAGAAATAT	TCCCATGCCT	AGATTCCAAA	180
TAATAAAAGA	CACTGAGAGT	GTTTTCAAAA	TTAATGGACT	GATTTAAATT	TCACTGGAAA	240
GCAGCTTTTT	AAAACTAAAT	TGTCTGGATG	TGGCCTCCCT	GTGATCACTT	CCAAGTCTT	300
ACTGCCAACT	TCTGGCGGCT	CGAG				324

(2) INFORMATION FOR SEQ ID NO:855:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 616 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:855:

GAATTCGGCC	TTCATGGCCT	AACGGCCTTC	AGATGGAAGG	AGGGCAGGTG	CATATCTGTT	60
AGCAAAATCT	TCACAATCAT	CTTGAGTTTC	TCAGCAAAGT	CGGCCTGGCT	GGAAATTCCT	120
GGCGTGCCA	TGCTGAAGGT	GACCAGCAAC	ACAGCCCCCA	GGATGGTCAG	TTGTTCCAGC	180
TGCAACTGGA	GCTCGTGGAA	GCGAGACTGG	TCCATTAAAA	CTGTTTCGGG	GAACGGCCTC	240
TGGAGGTGGT	CCCACTTCAG	AAGCTTCAGG	TAAGCGTAAT	TCTGGACAGC	AACAGGGCTC	300
AGCCTGGGCA	TGTCCCCAGA	GCCAGCAGCC	ATTCCCCCA	CTGGCAGGGC	GTGTTTATAC	360
TTCTGAGTCA	TAAGGTCCTC	TGAGGCTTCT	TCCAGCCACT	GGGTGACAAA	GTCCAGGGAA	420
TTTGGTTGCC	TCTCCAAAAT	CTCTTGAAAC	TTCTTCCTTT	CGTATTCAAC	TGACTGCTGC	480
ATGAGATGAG	GCCTGATGCT	ACTGATAGCA	AAGTTGGCCA	TGTCCACTTT	CATTAGGTCC	540
AACACAGAAA	AAATTTCTCT	GAAAAGGGGC	ACTATTTCTT	TAATGTCCTT	TAGTTTCTTA	600
ACTTCCTCAT	CTCGAG					616

(2) INFORMATION FOR SEQ ID NO:856:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 497 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:856:

GCTCTGGGTG	AAAAGATCTC	ACACCAATGT	ACATAATGTG	GCCATCCTTT	CCATTTTCAA	60
GAAGTTGCC	TGCTTTGATA	CTGCAAATTC	AGTATTTGTA	CACTGGAATG	ATAAAAAGAT	120
GTTCCACTTT	CTTTTCAGCC	AGAAAGCTTC	CTCGTTGTGT	GTGTGCGTGT	GTGTCCCATC	180
CTATTGCCTG	TTCTTTCTAA	ATCTACATTT	TGTTACCTTA	TCCAATACTT	GCTTTAGCAA	240
GAACATTATG	GGGCCCCACCA	TATTCCACAG	GGCCATGCCA	ACCTTTGGAA	AAAAGGTAGG	300
TCAAGGAAGA	AATCAGAACA	AACCCTGTGA	CCATTCCACC	TCCTTGCAATC	TTGGGCTTGG	360
GTTTGGAAGC	TGACCAGCAA	GCTGGAGCTG	CCACCACAGA	GAAACATCAA	AGCAAAAGGG	420
TTCCAGGACC	AGAGATTAGG	TAAGTAGCTA	CAGGCCAGAG	GAATGCTTCC	CTCTCTAGAT	480
CAACAAGCAC	CCTCGAG					497

(2) INFORMATION FOR SEQ ID NO:857:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 262 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:857:

GTTTCATGGCC	TAGATGCTGG	TTTGTTTTTG	TTTTCGTTTT	TTTGAGACAG	TCTTGCTCTG	60
TGACCCGGGC	TGGAGTGAG	TGGTGCGATC	TCGCTCATTG	CAACCTCTGC	CTCCCAAGTT	120
CCAGCAAGTC	TCCTGCCTCA	GCCCCCACC	GAGTAGCTGG	GACTACACGC	AAGTGCCACC	180
ACGCCAGCT	ACTTTTTGTA	TTTTTAGTAG	AGATGGGGTT	TCACCATGTT	GGCCAGGCTG	240
GACTCGAATT	CCTGACCTCG	AG				262

(2) INFORMATION FOR SEQ ID NO:858:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 441 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:858:

GAAACTATAA	TCATCAGTAC	TGTAATGAGC	AATTATGAGG	CCTACAAGCC	TTCCACAGGA	60
GCTATGGGAG	ATCGACTAAC	GGCAATGAAA	GCAGCTTTCC	AGTCACAGTA	CAAGAGTCAC	120
TTTGTTCGAG	CCAGTTTAAG	TAATCAGAAAG	GCTGGAAAGTT	CTGCTGCTGG	GGCAAGTGGG	180
TGGACTAGTG	CAGGGAGCTT	GAATTCTGTT	CCAACTAACT	CAGCACAAAC	GGGCCATAAC	240
AGTCCTGACA	GCCCCGTCAC	CAGTGCCGCC	AAGGGCATCC	CAGGCTTTGG	CAATACTGGC	300
AACATCAGTG	GTGCCCTGT	GACCTACCCG	TCTGCCCGAG	CCCAAGGAGT	CAACAACACA	360
GCTTCAGGGA	ATAACAGCCG	AGAAGGGACT	GGGGGCAGCA	ACGGGAAAAG	AGAGAGATAT	420
ACTGAGAACC	GGGAACTCGA	G				441

(2) INFORMATION FOR SEQ ID NO:859:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 384 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:859:

GAATTCGGCC	TTCATGGCCT	ACTGGTCGCC	AATGTGCTGC	AGGTCATGGC	TCCGGAATCA	60
AATTGGGCTC	AAACGGGGCA	AGCTCCAACA	CAGTGGAGCC	TGGCGCTACT	CCCACCTCCA	120
CCTTGCGGAT	CTCAGAGCTG	CAGGATGGCT	CTGCCACCG	CACCCTGAGC	TGGCCCCGCT	180
TGGGGCTGGC	ATTGGGGGAC	AGTGTGTTCT	GGGCGTCTCT	GCTCCTCTCT	GCTGGTGCCT	240
GTGCCTCTGC	TGGCCGCCCA	CTCATAGATG	TCAGAGCCAC	AGGACGGCCC	CGCAGAATCC	300
CTGCGCCGAC	CCTGCCGGGG	GCTGGCTTTG	GTGCACATGC	AACTCGTCAT	CGTGGTCCCC	360
ATGGGCACCT	CTGCTCTTCT	CGAG				384

(2) INFORMATION FOR SEQ ID NO:860:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 421 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:860:

GAATTCGGCC	TTCATGCCTA	CGTTTCCCGA	GAAACCAAGC	CACAAAAAGT	ACAGGGCCGC	60
CCTGAAGAAG	GAGAAACGAA	AGAAACGTCG	GCAGGAACCTT	GCTCGACTGA	GAGACTCAGG	120
ACTCTCACAG	AAGGAGGAAG	AGGAGGACAC	TTTTATTGAA	GAACAACAAC	TAGAAGAAGA	180
GAAGCTATTG	GAAAGAGAGA	GGCAAAGATT	ACATGAGGAG	TGGTTGCTAA	GAGAGCAGAA	240
GGCACAAGAA	GAATTCAGAA	TAAAGAAGGA	AAAGGAAGAG	GCGGCTAAAA	AAACGGCAAG	300
AAGAACAAGA	GAGAAAGTTA	AAGGAACAAT	GGGAAGAACA	GCAGAGGAAA	GAGAGAGAAG	360
AGGAGGAGCA	GAAACGACAG	GAGAAGAAAG	AAAAAGAGGA	AGCTTTGCAG	AAGGGCTCGA	420
G						421

(2) INFORMATION FOR SEQ ID NO:861:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 271 base pairs
- (B) TYPE: nucleic acid

- (C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:861:

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GGATTCTTT GGAATGGGCA AAGAAGTGGG GAATCTGCTA CTGGAAAAC CACAGCTTCT 60
GGAAACCAAA AACGCCTTGA ATGTGGTGAA GAATGACCTG ATTGCCAAGG TCGACCAGCT 120
GTCCGGGGAG CAGGAGGTGC TGAGGGGCGA GTTGGAGGCT GCTAAGCAGG CCAAAGTCAA 180
GCTGGAACAA CGTATCAAGG AGCTGGAAGA GGAAGTGAAG AGAGTGAAGT CCGAGGCCAT 240
CATCGCCCGC CGTGAACCCA AAGTTCTCGA G 271

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(2) INFORMATION FOR SEQ ID NO:862:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 288 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:862:

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GCGGCTCTTT GGGAGGTGGT CAGGGGAAAA GATGGTCAGT GCTTTTCTG GACAAATCCA 60
GGGGCCAATT GAGGTGGGGA GTCTATGAGA AGGGCCCTGT CAGCTGAGGC GAGGGAAAGG 120
GCAGAGGACC TAGAATAAAA GGATATGGCC TCTCTGTGCA CTAGCAGGAT GGGTAGGAAA 180
GGGAGATATG AAAAGACGAA ATGGGGACCG GGTGCGGTGG CTCACGCCTG CAATCCCAGC 240
ACTCTGGGAG GCCAAGGCAG GCAGATCACC CGAAGTCAGG AGCTCGAG 288

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(2) INFORMATION FOR SEQ ID NO:863:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 326 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:863:

```

GCTCGAGTGG AATGGGCCGA GGAGATGGAT TTGATTCTCG TGGCAAACGT GAATTGATA 60
GGCATAGTGG AAGTGATAGA TCTCTTTTT CACATTACAG TGGCCTGAAG CACGAGGACA 120
AACGTGGAGG TAGCGGATCT CACAAGTGGG GAACTGTCAA AGACGAATTA ACAGAGTCCC 180
CCAAATACAT TCAGAAACAA ATATCTTATA ATTACAGTGA CTTGGATCAA TCAAATGTGA 240
CTGAGGAAAC ACCTGAAGGT GAAGAACATC ATCCAGTGGC AGACACTGAA AATAAGGAGA 300
ATGAAGTTGA AGAGGCTCTT CTCGAG 326

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(2) INFORMATION FOR SEQ ID NO:864:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 546 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:864:

GGAATGGGGA	GAGGGATCTA	CCAAGGTNAC	AGCAGTTTTT	TGAGCAGCTG	GCACGTGCCT	60
CTGCTGCCAA	CATGATGAGG	TACAGAACCC	AGCACAGGGA	ATGCTCAGCC	TGTGACTGTG	120
AGCTGGATGT	GAGAGTCTCC	TGAGGACCCT	CGGTATACTC	AGAGCATTTC	CTCTCAGGGT	180
GCAGGAAGAG	GAAAGCAGAG	GAAGTGGA	TGAAGGACCA	AAGGTGGGAT	CCTAGCTGGG	240
CCAATCACTG	AGAAGCCATG	TGGTCTTGGG	CAAGTCATTG	CCTTCTCTGA	GCCTCAGTTT	300
CCCCATCTGT	AAAATGGAGG	TAATGATACT	ATGCCTACCT	CATCATCATG	CTGTGAAGAT	360
TAAATGAGTT	ATGCCATGGA	AGTGCTGTAC	ATTACCCATT	GATAATGTCT	CAGTGGCCTC	420
TCAATGAAAT	GGAGTGTGAC	AGAGTGCCAC	ACTCTGAAAC	GGCTCATCCC	CGGTGATGGT	480
GCTGGGACTA	GAACCCGGGC	AACCTCGCAG	TGCCATGCCC	TACTGCATCA	CTACGTCCAC	540
CTCGAG						546

(2) INFORMATION FOR SEQ ID NO:865:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 808 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:865:

GAATTCGGCC	AAAGAGGCCT	AAGGATTCAT	AGTATAAATC	TTTAATTTAT	CACAGTCTGT	60
ATTAAGTAAT	ACTAAACCAC	TTTCGCATATA	AATACATCAC	AACAGTATAC	TTCCGTTTAT	120
GCTATCTTGG	TCTTTGTACT	TTTGTTTTTG	TACATTTTAC	TTTGGCATAA	ATGTCAAAGT	180
ACAGTATTGT	TATTTAGCTT	TAAATATTCA	TTTGCCCTCTC	TCCTTAATGT	AAAAAGGCTT	240
CTTCTCAACT	TCCTGACATT	TCTTGCTAAA	CTATACACGT	CTGCCCTGTT	TTCCAACAGC	300
ACACTGTTCT	GTACTGTCCC	TTATTTATTT	TTTTTTTTTT	TTTTTTTGG	AGACGAGCTC	360
GTTCTTTGCC	CAGGCCGGAC	TGCAGTGGTG	CTATTTCCGG	TCACTGCAAA	CTCTGCTTCC	420
CGGGTTCACG	CCATTTTCCG	GCTTCAGCTT	CCCGAGTAGC	TGGGACTACA	GGCGCCCGCC	480
ACCACGCCCC	GCTAATTTTT	TGTATTTTTA	GTAGAGATGG	GGTTTCTCCG	TGTTAGCCAG	540
GATGGTCTTG	ATCTCCTGAC	CTCGTGATCC	GCCCACCTCG	GCCTCCCAAA	GTGCTGGGAT	600
TACAGGCGTG	AGCCACCGCA	CCTGGCCTAT	TCTGTCCCTT	TTTAAAGCAG	TTCTCTTTTA	660
AAAAATTGTG	GTAAGATATA	AATCACATAA	AATTTGCAGT	TATAACCATT	TTAAAGTATA	720
TAATTCCATG	GCATTAATTA	CAGTCACAGT	CTTTTACAAC	TATTATTACT	ATGTATTCTT	780
AAAGTTTTTT	TACCCTCCCC	CCCTCGAG				808

(2) INFORMATION FOR SEQ ID NO:866:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 361 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:866:

GAATTCGGCC	TTTCATGGCCT	AAAAGAAAAT	GGCTTCAGTA	AGTTAGGATG	AAAAATGAAA	60
ATATAAAATA	AAGAAGAAAA	TCTCGGGGAG	TTTAAAAAAA	ATGCCTCAAT	TTGGCAATCT	120
ACCTCCTCTC	CCCACCCCAA	ACTAAAAAAA	GAAAAAAGG	TTTTCTAATG	AAAATCTTTA	180
AAAATACTGT	CAGTATTTTA	AAATTTTCAA	CAGTATTATA	AAAACATTGC	ATCTCCCCAC	240
CTCTAATATG	CATATATATT	TTTCCTGCTA	AAATTGGTTT	CTACAATTGA	GTAATGGCA	300
AATACATGAA	GCAATGTCCC	TAAATTTTAT	AAAGAAATTA	TATTTAATGC	ACATTCTCGA	360
G						361

(2) INFORMATION FOR SEQ ID NO:867:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 880 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:867:

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GAATTCGGCC AAAGAGGCCG GAATTGGGCC CTCGAAGCCA AGAATTCGGC ACGAGGAAAA      60
CAGTCTTTTA ACCTTTCAAA ATGCCACAAT GTGCATTTTA GATTGCCCTT AGTTTCCCAA      120
CTCTCAGTAT ATAGAGACTC AATTAGAAAA GAAATGGTGC TAGTAGCTTC AACCCACTGG      180
TATGTATTTG AGGAACGTGT CCTGGTAGAA GGCAGTACCG TGTCCCTTGG TATTGCTACT      240
GTGCCTGCTA TGTACTTCTT TTATGTATAT GATATGGAAG TAACCTCCTT TATACATGTG      300
GAGAAGTTTC ACAGCTTTTT TTCATAGTCA TTGCATTAAA ATGTCTGCTG AGGCTGGGTG      360
TGGTGGCTTA CGCCGGTAAT CCCAGCACTT TGGGAGGCCA AGGTGGGTGG ATCACCTGAG      420
GTTGGGAGTT CAAGACCAGC CTGACCAATA TGGTGAACT CCGTCTCTAC TAAAAATACA      480
AAAATTAGCT GGGTATGGTG GCGCACACCT GTAATTCAG CTCCCGCCGG GCGACTCGAC      540
CAAAGAGGCC GGAATTTGGC CCTCGAAGCC AAGAATTCGG CACGAGGGGT ATTTTATTT      600
TTANTTNTTC TGTTCCTCTC TNGAGTGTAT AGTGTAGAGG GGGTTTCTGT CTTGAGTGTA      660
GGCCTGGAGA TTTCCCTTAT ATGGTACAAA CCAGCAATGA ATTAAGAGGT CTCTTTTCTC      720
CAAGATCTAG TGTTTTGTAC TAGGAGAACT CTAAAAAGTA TCTATTTTAC TGTAGTGCCA      780
AAGTACAAAT TTATTTGGAT TTATTTTTTG CCATCTTATT TTTTAATATA TTTCTTTTTC      840
TATGTTGTGC TTCTTTCCCA CCTCATCTCT CCTCCTCGAG      880

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(2) INFORMATION FOR SEQ ID NO:868:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 366 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:868:

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GAATTCGGCC TTCATGGCCT AGTCATGGCT TTAGAATCTG GAGAAGAGTC TGA CTCACTT      60
CTTTCCTGAG GGGATGCACT GGGTTTCACA TCAAGTTCTT GAGAGGATCC CGAACGACTT      120
CTCTGCCCCA GGGGAGTCCG AGCCACAGTT TTCTGATCAA CTGATGATTC TGACCCGCTT      180
CTTTCTCTCT GGGGGGTAAG ACACTTGTG TTAGAGCTCTG GGGATGATGG AGAACGACTC      240
CTCGGCCTAG GAGTCTGAGG CAAAGCTTTC GGTTCCTGGG AAGAATCACA TTCGCTTCTC      300
CCTCTAGATG GCGTTCTAGG TATATCTTTC ATTCCAGGAG AGGACCCAGA CAGGCTGTGC      360
CTCGAG      366

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(2) INFORMATION FOR SEQ ID NO:869:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 529 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:869:

GAATTCGGCC	TTCATGCCTA	GAGGATCTTC	TCCTGACCCA	GCATCGCTCA	TCACAATGAA	60
GAACCAAGAC	AAAAAGAACG	GGGCTGCCAA	ACAATCCAAT	CCAAAAAGCA	GCCCAGGACA	120
ACCGGAAGCA	GGACCCGAGG	GAGCCCAGGA	GCGGCCAGC	CAGGCGGCTC	CTGCAGTAGA	180
AGCAGAAGGT	CCCGGCAGCA	GCCAGGCTCC	TCGGAAGCCG	GAGGGGGCTC	AAGCCAGAAC	240
GGCTCAGTCT	GGGGCCCTTC	GTGATGTCTC	TGAGGAGCTG	AGCCGCCAAC	TGGAAGACAT	300
ACTGAGCACA	TACTGTGTGG	ACAATAACCA	GGGGGGCCCC	GGCGAGGATG	GGGCACAGGG	360
TGAGCCGGCT	GAACCCGAAG	ATGCAGAGAA	GTCCCGGACC	TATGTGGCAA	GGAAATGGGGA	420
GCCTGAACCA	ACTCCAGTAG	TCAATGGAGA	GAAGGAACCC	TCCAAGGGGG	ATCCAAACAC	480
AGAAGAGATC	CGGCAGAGTG	ACGAGGTCGG	AGACCGAGAA	GCCCTCGAG		529

(2) INFORMATION FOR SEQ ID NO:870:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 372 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:870:

GAATTCGGCC	TTCATGGCCT	AATTGAGCT	TCAAGTCTCC	ATGTGTATAA	TGTGGGGTTG	60
ATGCTGTGGT	GCTCCAAGGT	GTTGGGGGGT	TTTAGGCAGA	GTTCTTATGC	TTAATATAGG	120
ATGGAAAAGT	GTTTCGAGCTT	CTTCCCTTTT	CTCTTTCTTC	TCTTCATCTG	ACATGAGCCT	180
GGGGTTCTAC	CTCTTCCAGA	TAATTCATCC	TGGAGCTACT	AATTCTATCT	CCCCATTGAT	240
TTTAGTGTCC	TGTCTGTTTC	TAAATCTACT	GGGCAGTTGG	AGACATTGTC	TTTGTTTCCC	300
TCATCTATCT	TCTGTATCCA	CAGTTGATAA	TTGTCTATGT	TTTAGTGTG	TTTAAAGGAA	360
ACTAGTCTCG	AG					372

(2) INFORMATION FOR SEQ ID NO:871:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 574 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:871:

GAATTCGGCC	TTCATGGCCT	AGGTGGTGGG	TGCCTGTAGT	CCCAGCTACT	TGGGAGGCTG	60
AGGCAGAAGA	ATTGCTTGAA	CCCGGCAGGC	AGAGGTTGCA	GTGAGCTGAG	ATCGTGCCAC	120
TGCACTCCAG	CCTGGGTGAC	AAGAGTGAGA	CTCTGTCTCA	AAGAAAAGAA	ACAAAAAATT	180
ATGTACACAA	ATATGGACAG	CACTGGCAAG	AAGTGTGGCA	AAAACACATG	TGGTTCTCTT	240
GTTTTGGGCT	CAGACATGTG	GCTGTGCCAT	TACAGACCCC	CGGGATTTAG	AATCCTCCTT	300
CTGAAAGGCG	TCCTGTGCAC	TCGTGAGCAC	CAGCCTGAAC	AGATGAAAAG	GCTGAGCTGG	360
AGGGGCTGGG	ACACAGCCCA	CCTTGACGAC	AGCTGCTCCT	GGCTGTGCGG	GGGGGTCTCC	420
AGGAAAGGCC	ATTCTCCAC	TAGGATCGCC	AGGCCCTACT	GAGGCTCAAG	CTCCTTTGCT	480
GTTTGGAATC	TTCCCTCCCC	AGCCCCCAG	CCTCATCAAA	GGCTGCCTTT	TCCTGTTTAC	540
TGACCACAGC	TGCTTTGACT	CCATTAGCCT	CGAG			574

(2) INFORMATION FOR SEQ ID NO:872:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 528 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:872:

GAATTCGGCG	TTCATGGCCT	ACCAGACTAC	TACGGACTCA	TCTAACAAAA	CAGCACCCGAC	60
TCCAGCATCC	AGTGTACCA	TCATGGCTAC	AGATACAGCC	CAGCAGAGCA	CAGTCCCCAC	120
TTCCAAGGCC	AACGAAATCT	TGGCCTCGGT	CAAGGCGACC	ACCCCTGGTG	TATCCAGTGA	180
CTCACCAGGG	ACTACAACCC	TGGCTCAGCA	AGTCGCAGGC	CCAGTCAACA	CTACCGTGGC	240
TAGAGGAGGC	GGCTCAGGCA	ACCCTACTAC	CACCATCGAG	AGCCCCAAGA	GCACAAAAAG	300
TGCACACACC	ACTACAGTTG	CAACCTCCAC	AGCCACAGCT	AAACCTAACA	CCACAGCAG	360
CCAGAATGGA	GCAGAAGATA	CAACAAATTC	TGGGGGGAAA	AGCAGCCACA	GTGTGACCAC	420
AGACCTCACA	TCCACTAAGG	CAGAACATCT	GACGACCCCT	CACCCTACAA	GTCCACTTAG	480
CCCCGACAA	CCCCTTCGA	CGCATCCTGT	GGCCACCCCC	AACTCGAG		528

(2) INFORMATION FOR SEQ ID NO:873:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 611 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:873:

GAATTCGGCC	TTCATGGCCT	AAGCTGCACA	AAACGTAGAA	AGAAGACATA	GCGCCTGCCA	60
GGGAATAGG	AAATGAGGGC	ACTTACACAT	TAATGTGAAT	TAGTAATTGT	GGTATAGAAA	120
TGTTTTATAG	TGAAAGATTC	AAATTTGCTT	TTCAAGAAAA	ATGCCAAAAG	CTATTTAAAT	180
AATTCGAGGT	TACATCGTAG	GTTTTGATTT	TTCTCAATTT	AAGATACAGA	AATACAGCAA	240
GCCTTAATAT	AAAGTTTCCT	AAAGTTTCTT	CAAGTATTTT	TTAAGGTGGA	GAAATGCAGG	300
AATTGTATAA	CCAGAATTGT	TTCTGCCTTT	AGCTTTTCAG	AACTTGAGAT	GTGGCAGCAC	360
TGGACTGGGT	TTTTTTAAAT	GTTAGGACTA	GGAATGTTTG	CTCTTGTTAA	TTATGAATTA	420
ATTGATTATT	AAGTTTAGAA	TGCATTTTTA	CAAGTATCTA	ACTATCAAAT	TGTGTTTAGT	480
AACTTGAGTG	TATGCACAAG	TTTGATCAAC	AGCAAAATAG	AGTTCTGAAT	TTCTTTTAAA	540
GTGATGATAT	ATTATTTTGT	GAAACTTTGT	GTTTGAAAT	GTTTATTTCT	GTTTATGGTG	600
TAATACTCGA	G					611

(2) INFORMATION FOR SEQ ID NO:874:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 303 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:874:

GAATTCGGCC	TTCATGGCCT	ACGAGCGGTG	AAGGAGGAGA	CCAAGGAGGA	TGCTGAGGAG	60
AAGCAATAAA	TCGTCTTATT	TTATTTTCTT	TTCTCTCTCT	TCCTTTCTCT	TTTTTAAAAA	120
ATTTTACCCT	GCCCCCTTTT	TTGCGTTTGT	TTTATTCTT	TCATTTTAC	AAGGGACGTT	180
ATATAAGAA	CTGAACCTCA	CATTCAGGTT	GTTTTTTTTT	TGTTTTCTAA	GTTTTTGCCC	240
TATTGAAGAT	GACTTCAGAA	AATCCATTCC	CCAGTCATGA	AAATGTACTG	TGCTATTCTC	300
GAG						303

(2) INFORMATION FOR SEQ ID NO:875:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 348 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:875:

GAATTCGGCC TCATGGCCTA ACGGCAGCGG CAGCCTCTGA AAAGAATCGG GGCCCAAGAA	60
AAGGCGGTGCG TGTATCGCT CCCAGGAAGG CGCGCGTCGT GCAGCAGCAA AAGCTCAAGA	120
AGAACCTAGA AGTCGGAATC CGGAAGAAGA TCGAACATGA CGTGGTGATG AAAGCCAGCA	180
GCAGCCTGCC CAAGAAGCTG GCACTGCTGA AGGCCCCAGC CAAGAAGAAA GGGGCAGCTG	240
CCGCCACCTC CTCCAAGACA CCTTCCTGAG GACGCTGGCC CCAGTGCAGG CCAACATCCC	300
ACCCCTACC TCCATATGGG ACCTTGCAAG TCATCCCACT TCCTCGAG	348

(2) INFORMATION FOR SEQ ID NO:876:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 586 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:876:

GAATTCGGCC AAAGAGGCCG GAATTTGGCC CTCGAAGCCA AGAATTCGGC ACGAGGAGAC	60
TATTTTCCAT TTCACACAAG AAATCTTTGA TTATTCAGTA AAAAGAGGAA ATATAAGAAA	120
AAAAATCAGA CTAGTCTGGC CAACATGGTC TAAAAATACA AAATTAGCCA GGCATGGTGG	180
CGGGCGCCTG TAATCCCAGC TACTTGGGAG GCCCAAGCAG GAGAATCGCT TGGACTCGGG	240
AGGCGGAGGT TGCAGTGAGC CGAGATCATG CCACTGCACT CCAGCCTGGC AGACAGAGCA	300
AGACTCCCTC TCCAAAAAAG TTAAAAAATA AAAAGAAAAA AAAGGCCGGG TGCAGTGGTT	360
CGGCCTCCCA AAGTGCGGGG ATTACAGGCG TGAGCCACCA TGCCCCGCCA CTTTCTGTAT	420
TTTTTAATAA ATAAGAAATA CACATTTAGT AGTAGTTACA AAGATCTGTA GGCCGTAGCA	480
AATATTCAGT AACTGGAAGA TGCCAATGAA CATTGTTGGG TAGTATTTAA ATAACAAAT	540
GTTCAAATAT TTGACAAGAT TAACAACACT ACACGGCCTT CTCGAG	586

(2) INFORMATION FOR SEQ ID NO:877:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 445 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:877:

GAATTCGGCC AAAGAGGCCG GAATTTGGCC CTCGAAGCCA AGAATTCGGC ACGAGGGTAA	60
TTTTAAAAAT TTATGTATTT TCTAGCATTT GCCTCAAGGA TTGAAATTTT TTTTTTACT	120
TGTGTTTACA GGTAGAATTC TTTATTTAAA AAGTCAGTTG AATATCAAAA CTATTTGATA	180
TTCTTCAGAC TGGAATATTA TTCTCTAGTG TAGAAGAAAA CATTTCCTGC TTACAAAACA	240
AATAGTAAAT ACTCTAAAT AGGGGTTGGC AAACCTTTCT TAAATAAAAG GCCAGATGGT	300
AACTATTTTA GGTTTTGTGG GCCATGTGTT GATAACTATT TTAGGTTTGT TGGGCTACGT	360
ATGGGGTCAC TCTCCCATTC TCTCTCTCTC TCTCTCTCTC TCTCTCTTTC	420

TGTGTGTGTG AGCGGCGCTC TCGAG

445

(2) INFORMATION FOR SEQ ID NO:878:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 586 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:878:

GAATTCGGCC	AAAGAGCCGG	AATTTGGCCC	TCGAAGCCAA	GAATTCGGCA	CGAGGGGGTGC	60
TCCATTCCCC	GAGAAGCCAG	GGGCAGGGTG	GGATGGGGAA	GACCAGGAGC	AGAGTCGAGC	120
CTCACAGAAG	CCAGCGCGGS	TCTCTGCTCA	GCACCCAGC	CGGGGCTCTG	GACCCAGGGT	180
AACAGCCCCA	GTTTCATCCCA	ACCCCTCTCA	GAGCCTCAAG	AGGGGTAGCT	CGGCTGCCGG	240
AAGAGAGGGG	TGCCCTATCC	CTGGCAACCC	CTCCACGTAG	CGTACCCAG	CACCTGCCAC	300
CGCCTTTGCC	ATTTCTTTGA	GCTTGAAGTT	AACCTCTCTTA	GAGTCTAACT	TTGGTTCATT	360
TCTGCACAGG	TACAATAGAT	GACTTTATTT	GTTTAAAATG	TTTAATATAT	ATACATACAT	420
ATATATATAT	TTGTCTGTAA	GAATTATGTT	TTAAACAGCT	GCTGTAGAGT	ACCTTTTTTT	480
AAGTAAATCT	TACAGTGGAG	TATATTTTTT	AAAGCACAAA	ATTGGTGCCA	AGACTGGGTG	540
AGAAATGTAC	ATTACCCCT	TATTATTTTG	CGTCGGATT	CTCGAG		586

(2) INFORMATION FOR SEQ ID NO:879:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 414 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:879:

GAATTCGGCC	AAAGAGCCGG	AATTTGGCCC	TCGAAGCCAA	GAATTCGGCA	CGAGGGGAAA	60
ATCTTGTCTC	AAAAATATAT	GAGTTTGGGG	GTAAGGGGTG	GGATAGCCAA	GCAAAATCAG	120
TAATTATTTT	AAAATGAACA	TATGAATTTT	TATTAACTTT	TAGTTAAATA	CAGATTTTAC	180
AACGAGGTCA	GCATAAGCCT	AAATCTATAT	AGAGGGCTAA	CTCAGGCATT	GTCTTGTTTA	240
TTTGTAGACT	GGATTAAAAA	CAACCTGTCC	TGTTTGTCA	GTTCCAGCT	TCTTCGTTTA	300
GAATAAATTA	GACCAAAGA	AGAAACGTGC	TTGTCTCTGT	ATACCCGAG	AATGAAGTTA	360
CTGTTGTAA	AACCGGATT	TTTCATTTTA	CTAGGTTCCG	CTCTCTCCCT	CGAG	414

(2) INFORMATION FOR SEQ ID NO:880:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 402 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:880:

GAATTCGGCC	AAAGAGGCCG	GAATTTGGCC	TCGAAGCCAA	GAATTCGGCA	CGAGGGTAAT	60
TTTAAAAATT	TATGTATTTT	CTAGCATTTG	CCTCAAGGAT	TGAAATTTT	TTTTTACTT	120

GTGTTTACAG GTAGAATTCT TTATTTAAAA AGTCAGTTGA ATATCAAAAC TATTTGATAT 180
 TCTTCAGACT GGAATATTAT TCTCTAGTGT AGAAGAAAAC ATTTTCTGCT TACAAAACAA 240
 ATAGTAAATA CTCTAAAATA GGGGTTGGCA AACTTTTCTT AAATAAAAGG CCAGATGGTA 300
 ACTATTTTAG GTTTTGTGGG CCATGTGTTG ATAACATTTT TAGGTTTTGT GGGCTACGTA 360
 TGGTGTCAAT CTCCTATTCT CTCTCTATCA CCTACCCTCG AG 402

(2) INFORMATION FOR SEQ ID NO:881:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 352 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:881:

GAATTCGGCC AAAGAGGCCG GAATTTGGCC CTCGAAGCCA AGAATTCGGC ACGAGGGGCC 60
 GTTTTTTTTT TTTTTTTTTT TTTTTTCNNG NNAGGCTTTC CCTAGGTGAT TTTTAATTGC 120
 TATTATAAAT AAATATCCAT TTTTCCCATTA AAATATTGCT ATATGTTAGT ATATTAATCT 180
 TGTACTGTTA CCTTTTCAA CTCTATTGGT TCTGATAGCT TGTCAGTTGT CTACCTTTCA 240
 TCTTCTAGGT AAATATTCT TACAAATAAT GAGATTTGCT CCTACTTTCC AATTTATCTC 300
 ATTACTTTTA CTNNTCTTAC TGCACTGGCT AGGACACCAC TACCTTCTCG AG 352

(2) INFORMATION FOR SEQ ID NO:882:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 351 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:882:

TTTTTTTTTT TTTTAACTT AAAAATAGTT GTATTTATAT TCCACAATTT GTTCAAATAC 60
 TGGTTTTCTT ATAACTTTC TACAGGATGT TTTTAAACAA ATCTTCACA TTGTGTTTTG 120
 ACTATGTACT TGCAGGAATT CAGGGAATA GTTCTGTGTA TTTTAATAG CTTAATTTGT 180
 ACTAAAGGGA TGGTAGGTGG TCACATGCAG TCCATGTGGG ATTCTAACAT GACATTTAGT 240
 GAGTTTCTG ATGTGGACCA TCCCTTTGAT GCTGAAGGTA ATGCATCTGT TGAAAGAAGT 300
 GACTGTAGAT TTGGATTACT GCTCTCTGCA TCTCCCTCTT TTCTGCTCGA G 351

(2) INFORMATION FOR SEQ ID NO:883:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 548 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:883:

GAATTCGGCC TTCATGGCAA GAAGGAGNCT TAGCATCAAA CTTTGGAAG GGAAGCCAGA 60
 GAAAAAGGTA GAATGGACAA GTGACACTGT GGACAAATGAA CACATGGGCC GCCGTTTCATC 120
 CAAATGCTGC TGTATTTATG AGAAAACTCG GGCCTTTGGC GAGAGCTCCA CGGAAAGTGA 180

TGAGGAGGAA	GAAGAGGGCT	GTGGCATACA	CACTGTGTAC	GTGGCCACCG	CAAAGGACGG	240
GTTNTGCAAC	CCTAGGACCG	ACCCCCACCA	CCCTTCCCCA	GCTCCTGACC	NTTCCCAGCC	300
CCCTCCAGGG	CCAATGCAGC	ACTAAATCCC	TCTCTCCTCC	AGCATTCTCTG	TGTCTGTCTG	360
GCCCTAAATG	TATCCATGTG	GCTACTTCTC	CAGCCCCCTC	CTTCCCTNTC	TTCTGCCTGA	420
TAGAGGGAAG	AGGAAGAGGA	GGACGAACAG	AGATCCTGAA	ATTCTGACTT	GCTGCTATTC	480
CAGAACCCAG	CCTCCTGGGT	TTCCCCAGTC	CTCATTTTTC	CTCCAATAC	CCACCCTTCT	540
CTCTCGAG						548

(2) INFORMATION FOR SEQ ID NO:884:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 446 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:884:

GAATTCGGCC	TTCATGGCCT	AAAAAATACA	AAAAATTAGC	CGGGCGTGTT	GGCGGGCGCC	60
TGTAGTCCCA	GCTACTTGGG	AGGCTGAGGC	AGGAGAATGG	CATGAACCTG	GGAGGCGGAG	120
CTTGCACTGA	GCCGAGATCG	CGCCACTGCA	CTCCAACCTG	GGAGACACAG	CGAGACTCCG	180
TCTCNAAAA	AAAAAAAAAA	AAAAAACAC	ACTTGTCTTA	CAAAGACTAA	CAAAAGATAC	240
AAAATAAAAT	AACTTTACAG	CATCATTAGA	AAGCGAACAA	AATCCTAAGA	TAGATACATT	300
TATCTTTCTT	GTTTtagAAC	TTTTTCTGTG	TAATGGAATG	GAAATGCTTA	ATCTTGTTTC	360
AATGTTTTCA	GTGTTTGTGC	TTTGTCAAAT	TGAGGTTGGA	TGTTAAAGCC	CTTACTACTG	420
TATTATACAA	AGCAGCGAAC	CTCGAG				446

(2) INFORMATION FOR SEQ ID NO:885:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 344 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:885:

GAATTCGGCC	TTCATGGCCT	AGCCGGCGCC	GCCGNGTCTT	CCCGGTCTCC	TTTCCCGGCC	60
GCACAGGGTT	TTATAGGATC	ACATTGACAA	AAGTACCATG	GAGTTTTATG	AGTCAGCATA	120
TTTTATTGTT	CTTATTCCTT	CAATAGTTAT	TACAGTAATT	TTCTCTTCT	TCTGGCTTTT	180
CATGAAAGAA	ACATTATATG	ATGAAGTTCT	TGCAAAACAG	AAAAGAGAAC	AAAAGCTTAT	240
TCCTACCAAA	ACAGATAAAA	AGAAAGCAGA	AAAGAAAAAG	AATAAAAAGA	AAGAAATCCA	300
GAATGGAAAC	CTCATGAAT	CCGACTCTGA	GAGTGTACCT	CGAG		344

(2) INFORMATION FOR SEQ ID NO:886:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 388 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:886:

GAATTCGGCC	TTCATGGCCT	AAAAATCTAA	ATTAACGTGAT	GAATAATTTA	AAACAGAATT	60
TCAACATTGA	GACAATGTAG	AGATATATTA	TGGTATAAAA	TGAAGCATT	GCACGAACTT	120
TTTAGCTAAA	ATTGTTTCA	AAGAAGTTGC	TTTTGTTTTT	AGTGACCTT	GAGTTCAACA	180
CAGATGTGAA	TGCCCCTTT	TTCCAGAAGG	GTTCTTGGGA	GAAAACACTG	GAGAAGTTCT	240
AAGCACTTTT	TTTTTTTTTT	TTTTTTTTTT	TTTTTTTAGA	GATGGTTTCT	TACTCTGTTG	300
TTCAGGCTGG	AGTGCAGTGT	TGCAATCATA	GCTCACTGCA	GCCTTGACCT	CCTGGCCTCA	360
AGTGATACCC	CTGTCTCAGC	CTCTCGAG				388

(2) INFORMATION FOR SEQ ID NO:887:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 364 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:887:

GCCCCAGTCT	AAGGCATTTA	AAATTAAACA	GCTCTTCAAC	GCCCCAAGTT	ATTTCATCAG	60
GCTAAGAACT	TCTCCGAGAA	ACGCACAAGA	AGGCAGGCAA	ACAGGTGGGT	AGGTGAGAGG	120
TCACGGGGCT	CCATCTGCAA	GCTCCATCTA	CAAGGCATCA	ATCTGCGTTG	TGGCATCAAC	180
GTAAAAATGT	TCTACAGCTT	AGGGATCTTC	TTGAAGCAAG	GTTCCAAGCA	CAAAACTAGT	240
ATGACCCGAG	GCTCAATTTA	GAAGATGCAG	CATCTGAAAA	CCTTACCCC	AGGAAAGGAG	300
GGGTGCCTGC	TGGCATTTCAT	GGGCTCTGGA	ACAAGCATT	ATTCAAAGCT	GATGGCCCCCT	360
CGAG						364

(2) INFORMATION FOR SEQ ID NO:888:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 416 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:888:

GCACCCCCAA	ATGCCAGCCT	CTCCTTCTT	CCCATCCACC	AGTATACTGC	GGGGCCATTT	60
CTGGTCTTTG	TCCAACAGGA	AACCCATTTC	TGGTGGGATA	TGCCTTCCAG	TGCCACAGGG	120
CCACTCACCC	CATGCATCTC	TGTCCTGCCC	GTCAGTGCTG	GGACGGACAG	CAAGGGCAAG	180
CCCAGTGTCT	GGCGGATAGG	TGGGTGGGAA	CAGAGAGGGG	AGAATGCCGT	CCTAAGCTTC	240
TGCTTGGGGA	TCCCCACAC	GACCTGGGTA	CTGCCTGGGA	AACCTGTCCT	AAGTAAACT	300
ATGGACCTCG	CCTCGCCAC	CGGCCTGCGA	AGCCAGCATC	TCCGTGAAGG	TGGATGGAAG	360
CGCCTTTGTC	CTCATTTTGA	GCTGCAAGCT	GGGTCAGCGG	CTCTGAAGCC	CTCGAG	416

(2) INFORMATION FOR SEQ ID NO:889:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 349 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:889:

GTAGGCCATG AAGGCCGAAT GGAAAAAGTC AGTTAAAGAG GACTCAGTCC CCACAGGTGC	60
GGAGGAGAAT GTGGTGTGTG AGTCACCACT AGAGATTATA AAGTCCAAGG AAGTAGAATC	120
AGCCTTACAA ACAGTGGACC TCAACGAAGG AGATGCTGCA CCTGAACCCA CAGAAGCGAA	180
ACTCAAAGA GAAGAAAGCA AACCAAGAAC CTCTCTGATG GCGTTTCTCA GACAAATGAC	240
ATCAGACTCC ACAGAAAAGA CTATCACACC GCCAGAGCCT GAACCAACAG GAGCACCACA	300
GAAGGTAAA GAGGGCTCCT CGAAGGACAA GAAGTCAGCA GCTCTCGAG	349

(2) INFORMATION FOR SEQ ID NO:890:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 719 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:890:

GAATTCGGCC TTCATGGCCT AGACCTGCCT CGAGGATGCT CTGGGTTTGC TGTAGTCGTC	60
TGTTACTGGT CNTGTTAGGA GGAGGGCCAG GGGGACCCCC ACCTGGGGCA GTCCCTTCTG	120
TCCCTTCAGC AGGTGGCTGA GCTGGAGCAG ACATTTTCT GACAGAGAGA GTGAGGTCT	180
GTTCTCTCC GGAGGCTGCG GCGAGACACC CGGCGAGGGA CGCTGCGGCT GAAGTGGACG	240
GAATGCCAA GCTCCGCCTC GCGCCGACTA CCCGCGGTC TAGCTGCGCT GGGGTTTAC	300
CATGTTGGCC AGGATGGTCT CGATCTCTTG ACCTTGTGAT CTGCCTGCCT CGGCCTCCA	360
AAGTGCTGGA ATTACAGGTA TGAGCCACTG TGCTGACAC CTGTCAAATT ATTTTACTGT	420
GTTTATTAC CATGTTTCTT TCACTGTGGG GTCTCTGTCC TTGCTGTTT GTTTTCTTT	480
TAATTTCTT TGTATTATG GAAGGTTTAT ATTAATATTT TAATCTACA TTGGATAATT	540
CCTATATCAA AACTATTGTT GACAATCAGT TACAGATGGA ACTTCGTCTA CTCTTCTCC	600
CCTTCTCACT CCTGCTCTT CTCCCTTTCT CACTCCAGCA GTTGACTAGT CTCATTGAAA	660
AAACAAATTG GGGCCGGCCA GGCATGATGG CTCATGCCTG TAATCCCAGA CAACTCGAG	719

(2) INFORMATION FOR SEQ ID NO:891:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 453 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:891:

GAATTCGGCC TTCATGGCCT AGATACTCCG CTGAAGATCT GATGTCACCC CAAATGCATG	60
GCTCCAGCCT CAGTTCAGCT TTCCACACTG CTTGCAGAAA TTCCTTCATT TATCTTGAGT	120
TTCTCCTCTC ACTCCCATGG TAGCTTTTCC ATTCCCACTG CCTCTTCTCA CATTTCAGTA	180
GATGAGAATA GAAGCCATAG GAAGCAAACCT TCCTCAACCT CCAGCCAACC GCCGAGCGAT	240
GGGCATCTCT CGGGACAACCT GGCACAAGCG CCGCAAAACC GGGGGCAAGA GAAAGCCCTA	300
CCACAAGAAG CGGAAGTATG AGTTGGGGCG CCCAGCTGCC AACACCAAGA TTGGCCCCCG	360
CCGCATCCAC ACAGTCCGTG TGCGGGGAGG TAACAAGAAA TACCGTGCCC TGAGGTTGGA	420
CGTGGGGAAT TTCTCCTGGG GCTCAGACTC GAG	453

(2) INFORMATION FOR SEQ ID NO:892:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 350 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:892:

GAATTCGGCC	TTCATGGCCT	ACCAGCCTCT	GGGCTGAGGC	AAAGACCTCT	GAGGCCCCGT	60
CCACCCAGGA	CCCCTCCACC	CAGGCCTCCA	CTGCGTCCTC	CCCAGCCCCA	GAGGAGAATG	120
CTCCGTCTGA	AGGCCAGCGT	GTGTGGGGTC	AGGGACAGAG	CCCCAGGCCA	GAGAAGCTCTC	180
TGGAGCGGGA	GGAGATGGGT	CCCGTGCCAG	CGCACACGGA	TGCCTTCCAG	GACTGGGGGC	240
CTGGCAGCAT	GGCCACGTC	TCTGTGGTCC	CTGTCTCCTC	AGAAGGGACC	CCCAGCAGGG	300
AGCCAGTGGC	TTCAGGCAGC	TGGACCCCTA	AGGCTGAGGA	ACCCCTCGAG		350

(2) INFORMATION FOR SEQ ID NO:893:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 467 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:893:

AACAGGAGAT	GGACAAGCTG	AAGGAGCAAT	ATGATGCTGA	GTTGCAGGCC	CTGAGGGAGA	60
GTGTGGAAGA	AGCAACCAAG	AATGTCGAGG	TCTTGGCGAG	CAGGAGCAAC	ACTTCAGAGC	120
AAGACCAGGC	GGGGACTGAA	ATGCGCGTGA	AGCTTCTGCA	GGAGGAGAAT	GAGAAGCTGC	180
AGGGAAGAAG	CGAAGAGCTG	GAGCGGAGAG	TTGCTCAGCT	TCAAAGGCAG	ATCGAGGACC	240
TGAAAGGCCA	TGAAGCCAAG	GCGAAGGAAA	CGCTGAAGAA	GTACGAGGGA	GAAATACGAC	300
AGTTAGAGGA	GGCCCTTGTC	CACGCCAGAA	AGGAAGAAAA	AGAAGCTGTG	TCAGCCAGAA	360
GGGCCCTGGA	GAATGAACTG	GAGGCTGCTC	AGGGAAATCT	GAGTCAGACT	ACCCAGGAGC	420
AGAAGCAGTT	GTCTGAGAAG	CTCAAAGAGG	AGAGTGAGGC	GCTCGAG		467

(2) INFORMATION FOR SEQ ID NO:894:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 315 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:894:

GAATTCGGGC	TTCATGGCCT	ACTCAGCTTT	CCTGGTCTCC	CATCTGAACT	GCTTCTTTGT	60
GCACCTCTTG	TTCTTTCTCT	TGGCTCCCAG	TCTTGATTCC	TGTGATCACT	CTTGCATCAC	120
TAATTGCACA	AGTGATTTC	GGTGCAATTC	TGATTAGCCT	GCGTCCACAC	AGTGATCGAT	180
GATCCTATGT	GCCTAGAAAG	GACACTGTGT	GCTGCTCATG	ACCTGCAACA	GGAAAAAAGC	240
CATTCTTGT	TAGCAGTGTA	AGAACCCTAG	AGCAAAGGAG	TTGACCTTCT	GATTGAATAT	300
AAGCACAACC	TCGAG					315

(2) INFORMATION FOR SEQ ID NO:895:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 302 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:895:

GGGCTTAGTT AGGAGCTATG GCTAAACATC ATCCTGATTT GATCTTTTGC CGCAAGCAGG	60
CTGGTGTGTC CATCGGAAGA CTGTGTGAAA AATGTGATGG CAAGTGTGTG ATTTGTGACT	120
CCTATGTGCG TCCCTGCACT CTGGTGCACA TATGTGATGA GTGTAACAT GGATCTTACC	180
AGGGGCGCTG TGTGATCTGT GGAGGACCTG GGGTCTCTGA TGCCTATTAT TGTAAGGAGT	240
GCACCATCCA GGAGAAGGAC AGAGATGGCT GCCCAAAGAT TGTCAATCTG GAGGAACCTG	300
AG	302

(2) INFORMATION FOR SEQ ID NO:896:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 473 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:896:

GAATTCGGCC TTCATGGNCT ANTCTCATTT NAAATATATC CTTACTGAAA CATCTGGAAT	60
AACGTCTGAC CAAATATCTG GGTACAGTGA TCCAGCCAAG TTGAGACATG AAATTAATCA	120
CCATGGCCTA CATTTTATC TGTTTGGCTG CAATTCGTGC AAAGGCTTCT GCTCTTCATA	180
ACATTTCACT CACTAGCTCC ATGAAGCCAT ATGATACAAA CCTTGCCTGT GTAGCCTTCA	240
CTTTTTTCCA AAAGAAGTCT ATTAAATGCC AATCAAGTAT CTTCTCCTCC AAGCTCAGTA	300
GCTCGGGCCT TCAACAGCTG TTCCCCATTC CGATCCATCT CCCTGAGCTA CCCTGGCATT	360
CTTATCAGGA CACTGGAGGA ATCTATGTAT GTGCCTCTAA AGATTCAGCA CCCAAACATG	420
ATAGAAATCA CTGTGTTTAC ACTGTATCTC TATATCTGCC CATCCGCTC GAG	473

(2) INFORMATION FOR SEQ ID NO:897:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 594 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:897:

GCTCGAGTGA AGTGGTATCT CATTGTGGTT TGGGTTTTAA TTTTATAATA TTTTAATTTT	60
TAAAATCAAA AGAATATACT GGGGCTGGGG TGGTGGCTCA AGCCTGTAAT CCCAGCACCC	120
TGGGGGGCCA AAGGGGGTGG ACCACCTGAG TTTATGAGTT CAAGACCAGC CTGGCCAACA	180
CGGTGAAACC CCATCTCCAC TAAACATACA AAACCTAGCC GGGTATGGTG GCAGGCACCC	240
GTAATCCAG CCTCTCAGGA GGCTGAAACA GGAGAATCAC CTGATCCGGG AGGTGGAGGC	300
TGCCATGAGT CAGAATCACG TCACTGCACT CCAGCCTGAG AGGAGACCCG TACAAAAAAA	360
AAAAAAAAAA ATATATATAT ATACACACAC ACACACACAC ACAAGGATTT TAGATTTGAA	420
AATGATGTTT TTTACTCATT TCAAAATGTA CTGTAACCTT TCTTTGGTTC TTAGTTTGT	480
CATTAACTT TCTCTGTTT CAAGAAAAAT TGTCTTTATT GACATTTGTA AAAAAAGT	540
TGTTTTGCCC AGTTATTAAG TATTTTATTT TTATGCAATT TCAGAACACT CGAG	594

(2) INFORMATION FOR SEQ ID NO:898:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 302 base pairs

(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:898:

GAATTCGGCC	TTTCATGGCCT	ACTGTACATT	TTTTTTAAAG	TTTGTGAAA	AGAATATTGT	60
CTTATTCTAT	AAAACATTTT	AAACCTAGTT	AGAGATTGT	AATCAAAAAA	CATTGCGCA	120
GAAAGCAGCA	CTTAGGGCTG	CCTGTTCTAT	ACCCTACAGT	CAGACAGGAA	AAGAACTGAA	180
AATGGCACCC	TTCTGACATT	CTGAGGCAGC	TGGACTGGCA	GCCAAGTAAA	GGAGAGTGAT	240
GAGGTGGTGT	GGGGAGGGTG	GGGAGGCAGC	GCGAGGGTGC	TCTCCACAGG	GTAGGTCTCG	300
AG						302

(2) INFORMATION FOR SEQ ID NO:899:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 475 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:899:

GCGGCCTTCA	TGGCCTAGTG	CTTGTCAGTT	TGGAAAGTCA	CAGGGAGTTT	ACCATTCTAT	60
AATTAGAGTA	GGAGGAAAAT	GAGAACCCAC	TGGTAGAAGA	AGAAGCAACA	GTCTTCTAGG	120
GTCTGGCATT	TGATGAGATA	GGTATTCAGT	TACTGTGCAT	TTCCATTGTT	TTTCCATGGC	180
AGAACATACG	GCAGAGATTT	GGGAACTCGC	ATGCCTGAAG	CCAGGTTATT	CTTATGTTCT	240
GTAACATATG	TGCTCGCAGG	GCTGTTGTTG	TCAGAGTAGT	GAGTTGTGCC	CCAGACAAAT	300
GGGGTGCTGG	TCGTCTCCA	CAATCTTTA	TCCCAGTCTT	CATCGCAAGG	AGGGCACTGC	360
CAAGTGCTCT	CAGCCAGAGT	CTCTTGCTTA	AGGCTCCTGG	TTTGGTTGAC	AACATCTTGC	420
TCAATACAAC	TTCTGTCATC	ACAGCTTGAG	ATATGATGAC	TAATTTTCAGC	TCGAG	475

(2) INFORMATION FOR SEQ ID NO:900:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 507 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:900:

GAATTCGGCC	TTTCATGGCCT	ACAGCTGCCT	TTTTCTTTAA	AGGGGTTCTT	GTCTTCTGGA	60
ATTCCCTTTA	CTAGAGGATC	CTCTCCAGAA	CGTTCTTCAA	TATAGTTCTT	TATTTCTTCA	120
GAACATTTAG	ACACTTGTTG	TCTCTGCAAC	TTCATTCTT	TGCGAAGCTG	CTCAACTTCC	180
ATTTTCAGTT	TTTCTTCTC	TGGCAAATCT	TCGATGTGAA	GGGCAGGCAT	TTTCGCCCCA	240
GAACCGGGCT	CAGGCTAGCT	CTGGCAGCGG	AGCCGCTGGA	AGAGCGGCGA	AGCTCGGCGC	300
GTCCCGAAAC	AACTGAAGGC	CTGGCCCGCC	GCCCACCCGC	GCAGGATGTG	ACTGCAGCCC	360
TGCTGCGGTC	CCCAGCTCCC	CGAGGGCTTG	GCTTTCTCCG	GGACGCTTGT	CACGCCAGCG	420
TGCCCCAGCT	TCCTAGGACC	TGAGAACTCT	GCCTTTTCTC	AAGTCCCTGC	AACCCAGGAG	480
GCCTGCCCGG	GTGCTAGTAG	GCCATGA				507

(2) INFORMATION FOR SEQ ID NO:901:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 495 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:901:

GAATTCGGCC	TTCATGGCCT	AGTTTGGATT	TTCATATTAG	GGATACTCAA	CTGGTATTAT	60
TATTCTGGCC	CCTGCAAATT	TTTCAGTAGG	TCCCCTAGTA	TGTCATGCCA	GGGACTATGN	120
GAGTTCCTGG	GAATAGCACT	GTAANACATT	CTTGAGTGGG	TCCTTGACTC	CATTGAGTTT	180
ATAATCTCGT	AGGAGGAAGG	CTATGAAGAA	TTCTAATAAA	GCAAAGCAAG	CAATCACAAAC	240
AAACCTTCCT	CTTAACTTA	TCAAAAATGG	AAACTTTGAA	GAGCTGCTCT	TTAATAAATC	300
ATTGGAAAGC	ACCAGGACCC	AGGTGTTTTG	ACTCAGCCTC	ATTTCAGACT	GAGATCTGAG	360
GCCATGATAA	CTCATGTGCC	TATATATGCT	GATAATCACC	ATTACCTATA	CCATTCTTTA	420
CATTCTCTCA	TCTACACAAT	CATCTTCAAC	TCTCTCTCAT	CCACTTCAGC	GATTGAATTC	480
TTTACCGGCC	TCGAG					495

(2) INFORMATION FOR SEQ ID NO:902:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 266 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:902:

GAATTCGGCC	AAAGAGGCCT	AGAATTCCAG	ACCTAGCTCA	ACCCATGCCT	CCTTTCCTTC	60
CTCCCTCCT	TCCTTCTTT	CTTTTCCTT	TTCTCCTTCC	CTCCCTTCTC	CCTTCTCTCC	120
TTCTCTCCCT	CTTCTCTTT	CTCCCTTCTT	CCTGCTCTTC	CTTCTTCTCCT	CCCTCCCTCC	180
CCTCCCTTCT	TTCTTTCCT	CCCTCCCTTC	CATTCTTTCC	TCCCCCACCC	CCCGTTTCTT	240
CTCTTTGGAG	AGATGTACAG	CTCGAG				266

(2) INFORMATION FOR SEQ ID NO:903:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 410 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:903:

GAATTCGGCC	AAAGAGGCCT	AAATGAGAGC	TGAGTGAAGT	GGATGCCCT	TATAAAAACA	60
TCAGATCTCG	TGAGAACTTA	CTATCACTAG	AATAGCATGG	GGGAACCACC	CCATGATTCA	120
GTTACCTGCC	CCCAGGTCTC	TGCCACCACA	CATGGGGATT	ATGGGAACTA	CAACTCAAGA	180
TGAGATTGG	GTGGGGACAC	AGGCAAATTA	TATCAGCTGT	TGTGCTCATT	AGTTTGTATA	240
TCATCCTTGG	CTCCTTTAGC	ACTATAAGGG	CAGGATTGAG	TCCTTGCAAC	AGAAACCATT	300
CAGCCTGCAA	AGCTGAACCT	ATTTACTTTC	TGACCCTTTA	TGGAAAAGTT	TACTGATCTC	360
TGGACTAGAC	AGTTTTTTAA	AAATGACATC	TTATGACCGG	GATTCTCGAG		410

(2) INFORMATION FOR SEQ ID NO:904:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 326 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:904:

GAATTCGGCC AAAGAGGCCT AGCCGAGACT CTGTCTCAAA AAAAAGAAAA AAAGCTGCTT	60
TGGGTCTTAT GAGGGAGGGG ACTGGGAATC TAGGTGTTTC AAGCGCCCCA GGCGATTCTT	120
AAGGTCACAC AAGCTTGGGA GACACTTCAT TAAGCAAAAT CTTTGGCCG TTTTGTCTG	180
GTTGAGCCTC AGTGTCTATT CATTGAGTGG TCACCAAGAG TTTGGGGTGG ACTGATCATC	240
AGCATTTACA GGTTTGGAAA TTGAATTTAG TTTTACTACT CAGAGCTTAT TAGACTTGAG	300
CAGATTTAAA CGGAAGGACA CTCGAG	326

(2) INFORMATION FOR SEQ ID NO:905:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 410 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:905:

GAATTCGGCC AAAGAGGCCT AGGAACTGTT TTGACCCTGA AGGCTATTTA ATCCACTGTC	60
CCCTACAAGG CCTCACAAGT GCTGGGGGAA AAAAAACAGC AATGAGGATG ATCCTGAGTT	120
AATGTGTATG CTCGCAAGA GAGCTGCCT ATACCTTGAT TATTTCTATA AATCACATGT	180
TAATACATTG CTTTCAGAAT GAAATACTGA CTTGATCTGA TAGGAGAAAA TGGTAATATT	240
TCATAGTTGT TTCCCAAAGA CAAATTTAAA TGTTGTCTGT TATCTCCTTA CTTAGTTTAA	300
GAATTTAGTT TTGAACCCCA TTGACTTTGT CATTTGCAAT TTAAAAATA TTTGGGACTG	360
GGCATGGTCG CTCACGCCTG TAATCCAGC ACTTTGGGAG GCATCTCGAG	410

(2) INFORMATION FOR SEQ ID NO:906:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 498 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:906:

GAATTCGGCC AAAGAGGCCT ACGCTTCCCG GGTTCAGCG ATTCTCCTGC CTCAGCCTTT	60
TGAGTGGCTG GGACTACAGG TGGATGCCTC CATGCCTGGC TAATTTTTTG TATTTTAGTG	120
GAGACAGGGT TTCACCGTGT TGCCCGGGCT GGTCTTGAAC TCGTGAGCTC GGGCAATCCA	180
CACTCCTTGG CCTCCCAAAG TGCTAGGATT ACAGGTGTGA GCCACTGCAC CCGTTCGAGG	240
TACAGTTTTG AAGTTCATGC AAATCTCATC ATTTGCTCTT CTGCAACAAA ACATTTTCTT	300
TCAACTTATT TTGCCTGTGT GAAGCTCAGT GCTTTAACTC ATATATGGAG TTATCTTCTT	360
CCCTCAGACT GGAGACGTTG GTGAAATTGG GGCTAGACTG AAGATGTCTA AGGTGGCTTG	420
ATTGACAAAG GTCTCTCCTC ATCCCCAAAA TAAATAACAT TTTTTCATTT ATAATAGTAA	480
TACACCAGTC GACTCGAG	498

(2) INFORMATION FOR SEQ ID NO:907:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 481 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:907:

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GAATTCGGCC AAAGAGGCCT AAAGGCTGTC TGGTTTCACA TCACGACAGC AACGGGATTC      60
TTTTGCTTTG AAAATGTTGC AGTCCACCTG TCCAACCTGA TCTTCCGGAC ATTTGACTTG      120
TTTCTGGTTA TCCACCATCT CTTGCCTTTT CTGGGGTTTC TTGGCTGCTT GGTCAATCTC      180
CAAGCTGGCC ACTATCTAGC TATGACCACG TTGCTCCTGG AGATGAGCAC GCCCTTTACC      240
TGCCTTTTCT GGATGCTCTT AAAGGCGGGC TGGTCCGAGT CTCTGTTTTG GAAGCTCAAC      300
CAGTGGCTGA TGATTCACAT GTTTCAGTGC CGCATGGTTC TAACCTACCA CATGTGGTGG      360
GTGTGTTTCT GGCAGTGGGA CGGCTGGTTC AGCAGCCTGT ATCTGCCTCA TTTGACACTG      420
TTCCTTGTCG GACTGGCTCT GCTTACGCTA ATCATTAAAT CATATTGGAC CCAGACTCGA      480
G

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(2) INFORMATION FOR SEQ ID NO:908:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 764 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:908:

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GAATTCGGCC AAAGAGGCCT AGAAACAATG GTTTTCAGAC ACTGAAAGTT CATAGTACAG      60
GACTGTGATC TCTGCGAGAA GGGGAATAA TGAGGTGAGT CCAGTGATTG CTCAGGCGAA      120
TGGCCTGGAG GCAGTTTCTA GGCAGCAAAG CAGGGAGAGG GAAGCCAGAG ACCAGTGGTC      180
CTGCTGTGTT GAGGAGATGG AGATCAGTGT CACCGGAGGC CAAGGTGAGT AAGTGAGAGG      240
AGAGGAGGCA GCAGCACACA GACAGAGAGT GCTGTAGATC TGCAGTGGGT CCCCTGGAGT      300
CCTTGGTTGA GTGAAGGTGT TAGAAGAAAC TACTTAAGCC AAGAAATGAG TAACTGGAAA      360
TTAGTAGAGC AAATAATTTA CAGATCATCT ATGGGGCTGG GAAAAGTTTG TGTTTCCACT      420
AGCCAGAGTA GAAATAACTC ATAATGCATG GGTCATCAGG TGGAGTCCTC CAACAGGTGT      480
TGCCTTAGTA CTGAGGTCAA ATTGTCCCTA GACCAAAGGC TTCTTTGGAC TTCCCCTAAC      540
AAAGCTTAAA GACAAGCCTT GGAAGGATCA AACTAATTTT AAGAACTTA ACTGTGAATC      600
AGAATAAAAC CCAATACCAT TTATAGGAAT ATAACAAAAT CCATCAACAN ACNACATAAC      660
ACTCATAATT ACCAACATTC AGTAAAAAAT TACTGGAAAC AGAGAAATAT AAATTATGGC      720
CCATAATTAG GAAAAAAGGG TAATCATTAG AGGTAGAACT CGAG

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(2) INFORMATION FOR SEQ ID NO:909:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 157 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:909:

GAATTCGGCC AAAGAGGCCT ACTAAGGACT TGTTCGGAA GGAGCTGACT GGCCAATCAC 60
 AATTGCGAAG ATGAAGGCTC TGTGGGCCGT GCTGTTGGTC ACATTGCTGA CAGGATGCCT 120
 AGCCGAGGGA GAGCCGGAGG TGACAGATCA GCTCGAG 157

(2) INFORMATION FOR SEQ ID NO:910:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 487 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:910:

GAATTCGCGG CCGCGTCGAC AGAATAGACC TGGTTTGTGA ATTATGGCCT GGATTTCACT 60
 TATACTCTCT CTCCTGGCTC TCAGCTCAGG GGCCATTTC CAGGCTGTTG TGACTCAGGA 120
 ATCTGCACTC ACCACATCAC CTGGTGAAAC AGTCACACTC ACTTGTCGCT CAAGTACTGG 180
 GGCTGTTACA ACTAGTAACT ATGCCAACTG GGTCCAAGAA AAACCAGATC ATTTATTAC 240
 TGGTCTAATA GGTGGTACCA ACAACCGAGC TCCAGGTGTT CCTGCCAGAT TCTCAGGCTC 300
 CCTGATTGGA GACAAGGCTG CCCTCACCAT CACAGGGGCA CAGACTGAGG ATGAGGCAAT 360
 ATATTTCTGT GCTCTATGGT ACAGCAACCA TTGGGTGTTT GGTGGAGGAA CCAAAGTAC 420
 TGTCTAGGC CAGCCCAAGT CTTGCCATC AGTCACCCTG TTTCCACCTT CCTCTGAAGA 480
 GCTCGAG 487

(2) INFORMATION FOR SEQ ID NO:911:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 478 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:911:

GAATTCGCGG CCGCGTCGAC AGTTACTGAG CACACAGGAC CTCACAATGG GATGGAGCTA 60
 TATCATCCTC TTTTGGTAG CAACAGCTAC AGGTGTCCAC TCCCAGGTCC AACTGCAGCA 120
 GCCTGGGGCT GAGCTGGTAA AGCCTGGGGC TTCAGTGAAG TTGTCCTGCA AGGCTTCTGG 180
 CTACACTTTC ACCAGCTACT GGATGCACTG GGTGAAGCAG AGGCCTGGAC AAGGCCTTGA 240
 GTGGATTGGA ATGATTATC CTAATAGTGG TAGTACTAAC TACAATGAGA AGTTCAAGAG 300
 CAAGGCCACA CTGACTGTAG ACAAATCCTC CAGCACAGCC TACATGCAAC TCAGCAGCCT 360
 GACATCTGAG GACTCTGCGG TCTATTACTG TGCAAGGGAC AGCTCAGGCT ACGACTATGC 420
 TATGGACTAC TGGGGTCAAG GAACCTCAGT CACCGTCTCC TCAGCCAAAA CGCTCGAG 478

(2) INFORMATION FOR SEQ ID NO:912:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 433 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:912:

GAATTCGCGG	CCGCGTCGAC	CCAGGATGCC	GCGCAGCAGA	GCTCTGATTC	TGGGGGTCCT	60
CGCCCTGACC	ACCATGCTCA	GCCTCTGTGG	AGGTGAAGAC	GACATTGAGG	CCGACCACGT	120
AGGCACCTAT	GGTATAAGTG	TATATCAGTC	TCCTGGAGAC	ATTGGCCAGT	ACACATTTGA	180
ATTTGATGGT	GATGAGTTGT	TCTATGTGGA	CTTGATAAG	AAGGAGACTG	TCTGGATGCT	240
TCCTGAGTTT	GGCCAATTGG	CAAGCTTTGA	CCCCCAAGGT	GGACTGCAA	ACATAGCTGT	300
AGTAAACAC	AACTTGGGAG	TCTTGACTAA	GAGGTCAAAT	TCCACCCCAG	CTACCAATGA	360
GGCTCCTCAA	GCGACTGTGT	TCCCCAAGTC	CCCTGTGCTG	CTGGGTGAGC	CCAACACCCT	420
CATCATGCTC	GAG					433

(2) INFORMATION FOR SEQ ID NO:913:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 139 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:913:

GAATTCGCGG	CCGCGTCGAC	GCAAGATGGA	TTCACAGGCC	CAGGTTCTTA	TATTGCTGCT	60
GCTATGGGTA	TCTGGTACCT	GTGGGGACAT	TGTGATGTCA	CAGTCTCCAT	CCTCCCTGGC	120
TGTGTCAGCA	GGAGAGAAG					139

(2) INFORMATION FOR SEQ ID NO:914:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 166 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:914:

GAATTCGCGG	CCGCGTCGAC	ATCATGGCTA	CCCTGCGTGT	CCCACTCCTG	GTGGCTCTCG	60
TCCTTCTTGC	TGTGGCAATT	CAGACCTCTG	ATGCAGGTCC	CTATGGTGCC	AATGTGGAAG	120
ACAGTATCTG	CTGCCAGGAC	TACATCCGTC	ACCCTCTGCC	ATCAGC		166

(2) INFORMATION FOR SEQ ID NO:915:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 590 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:915:

GAATTCGCGG	CCGCGTCGAC	TTCTTGGGCA	GCACAGAAGA	CAGAGCCGAT	TTTGACCAAG	60
CTATGTTCCC	TGTGATGGAG	ACCTTCGAAA	TCAATGATCC	AGTGCCCAAG	AAGAGAAATG	120
GGGGGACCTT	CTGCATGGCA	GTCAATGGCC	TCCACCTGAT	CCTGCTCAGC	GCAGGTACTG	180
CACTGCTGCT	GATTCAAGTT	CTCAATCTGC	AGGAGCAGCT	CCAGATGCTA	GAGATGTGCT	240
GTGGCAATGG	ATCACTAGCT	ATCGAGGACA	AGCCCTTCTT	CTCGCTGCAG	TGGGCACCCA	300
AAACACACCT	GGTACCTAGA	GCACAGGGGC	TGCAAGCCTT	GCAGGCCAG	CTCAGCTGGG	360

TCCATACCAG	CCAGGAGCAA	CTCCGTCAGC	AGTTCAACAA	CCTCACTCAA	AATCCAGAGT	420
TGTTCCAGAT	TAAAGGTGAA	CGAGGCTCTC	CAGGTCCAAA	AGGGGCCCCG	GGTGCTCCTG	480
GAATCCCCGG	GCTGCCTGGG	CCAGCTGCTG	AGAAGGGAGA	AAAGGGGGCT	GCAGGTCGTG	540
ATGGAACCCC	AGGTGTCCAA	GGACCCAGG	GCCCACCAGG	AAAACCTCGAG		590

(2) INFORMATION FOR SEQ ID NO:916:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 592 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:916:

GAATTCGCGG	CCGCGTCGAC	GGAAGAGCAA	TGAAAACATA	TGCTCCTACA	TTATTCATGT	60
TTCTATGGCT	GCAGCTGGAT	GGGATGAGCC	AAGGTGAGCA	GGTGGAGCAG	CTTCCTTCCA	120
TCCTGAGAGT	CCAGGAGGGA	TCCNGTGCCA	GCATCAACTG	CACCTATGAG	AACAGTGCCT	180
CCAACTACTT	CCCTTGGTAT	AAGCAAGAAC	CTGGAGAGAA	TCCTAAGCTC	ATCATTGACA	240
TTCGTTCAAA	TATGGAAAGA	AAGCAGACCC	AAGGACTCAT	CGTTTTACTG	GATAAGAAAG	300
CCAAACGTTT	TCCCTGCACA	TCACAGACAC	CCAGCCTGGA	GACTCAGCCA	TGTACTTCTG	360
TGCTGCAAGT	GAGAGCACCA	ATACAGGCAA	ATTAACCTTT	GGGGATGGGA	CCGTGCTCAC	420
AGTGAAGCCA	AACATCCAGA	ACCCAGAACC	TGCTGTGTAC	CAGTTAAAAG	ATCCTCGGTC	480
TCAGGACAGC	ACCCTCTGCC	TGTTCAACCGA	CTTTGACTCC	CAAATCAATG	TGCCGAAAAC	540
CATGGAATCT	GGAACGTTCA	TCACTGACAA	AACTGTGCTG	GACAATCTCG	AG	592

(2) INFORMATION FOR SEQ ID NO:917:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 166 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:917:

GAATTCGCGG	CCGCGTCGAC	GAATGAGGTG	CTCTCTTCAG	TTCCTGGGGG	TGCTTATGTT	60
CTGGATCTCT	GGAGTCAGTG	GGGATATTGT	GATAACCCAG	GATGAACTCT	CCAATCCTGT	120
CACCTCTGGA	GAATCAGTTT	CCATCTCCTG	CAGGTCTAGT	AAGAGC		166

(2) INFORMATION FOR SEQ ID NO:918:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 200 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:918:

GAATTCGCGG	CCGCGTCGAC	GTCTGAGAGG	AACCCCTTCTC	TGAGGATGGA	CACCTTCTCAC	60
ACTACAAAGT	CCTGTTTGCT	GATTCTTCTT	GTGGCCCTAC	TGTGTGCAGA	AAGAGCTCAG	120
GGACTGGAGT	GTTACCAGTG	CTATGGAGTC	CCATTTGAGA	CTTCTTGCCC	ATCAATTACC	180

TGCCCCCTACC CTATAGTGAG

200

(2) INFORMATION FOR SEQ ID NO:919:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 231 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:919:

GAATTCGCGG CCGCGTCGAC CCAACCTTCC GGAAGCCTCC CCATCAGCAC CATGAACCCA	60
AGTGCTGCCG TCATTTTCTG CCTCATCCTG CTGGGTCTGA GTGGGACTCA AGGGATCCCT	120
CTCGCAAGGA CGGTCCGCTG CAACTGCATC CATATCGATG ACGGGCCAGT GAGAATGAGG	180
GCCATAGGGA AGCTTGAAAT CATCCCTGCG AGCCTATCCT GCCCACGTGT T	231

(2) INFORMATION FOR SEQ ID NO:920:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 115 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:920:

GAATTCGCGG CCGCGTCGAC GTTTTGTTAT TGTTACGAAG TAAATGATTC GTATGCTGTA	60
CATAGCTGTT ATAGAAGTGG CGATTAGTGT AATTAGTAGG GCTCAGGCTC TCGAG	115

(2) INFORMATION FOR SEQ ID NO:921:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 213 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:921:

GTTGAATTCT AGAAATCAAA ATTAATTGGA CAAAGGAAAA GCAGATGCCG GAAACTTCTT	60
CCAGTCTGT CATAAATTC ACCACTGGCC AGGTGCTGAG AGAAGCATTG GGAACAGTG	120
TGGGTTGTGT CAGAGTTGGA CGGCTCCATC CCTTTGGCTT CATTATCTTC CTCCTCATGG	180
AGATTCTAAA GCAACCCGTC GACGCGGCCG CGA	213

(2) INFORMATION FOR SEQ ID NO:922:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 504 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:922:

GAATTCGGCC	AAGAGGCCTA	CTTAGAAGCC	AAAGAAGGAG	ATTGTCACAG	GATAGAAATC	60
CCATTCAAAT	TCCACATGCT	GCATTCAGGG	CTGGTCCACG	GCCTGGCTTT	CTGGTTTGAC	120
GTTGCTTTCA	TCGGCTCCAT	AATGACCGTG	TGGCTGTCCA	CAGCCCCGAC	AGAGCCCCTG	180
ACCCACTGGT	ACCAGGTGCG	GTGCCTGTTC	CAGTCACCAC	TGTTGCGCAA	GGCAGGGGAC	240
ACGCTCTCAG	GGACATGTCT	GCTTATTGCC	AACAAAAGAC	AGAGCTACGA	CATCAGTATT	300
GTGGCCGAGG	TGGACCAGAC	CGGCTCCAAG	TCCAGTAACC	TCCTGGATCT	GAAAAACCCC	360
TTCTTTAGAT	ACACGGGCAC	AACGCCCTCA	CCCCACCCG	GCTCCCACTA	CACATCTCCC	420
TCGGAAAACA	TGTGGAACAC	GGGCAGCACC	TACAACCTCA	GCAGCGGGAT	GGCCGTGGCA	480
GGGATGCCGA	CCACCAGACT	CGAG				504

(2) INFORMATION FOR SEQ ID NO:923:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 119 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:923:

GAATTCGGCC	AAAGAGGCCT	ACATTCATCA	AGTCATCCAA	CTTCTATAGT	CAAAGCAGGA	60
TCATGTGGCG	AAGCATATGC	TCCACAAGGG	TGGATAGCTT	TTTTCATGGA	ATTCTCGAG	119

(2) INFORMATION FOR SEQ ID NO:924:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 706 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:924:

GAATTCGGCC	AAAGAGGCCT	AAAGAGAGTG	GAGGAGGAGG	ACAAGATTGA	TACTATGAGA	60
GTTGGAGGAC	ATAATTCATG	GATCATAGCT	CCAGAAGTGA	AAAGGGAGGA	AATGTAGACA	120
GAGGAAGGCA	TTAGCCATTG	AGAAGAATAG	GGACATATTT	TCTTTACTCT	CTTGTCAGAG	180
GAAGATAGCT	GGGGGAGTAT	AGACAAGTTG	TAAGAATGAA	GGAAGGAAGG	CAAGAGCAGA	240
CTTGTCGGAT	GAATTTTATT	TTCTCTATGA	AGTTTGAGAA	TTAAACTTTA	TGCTGAGAAG	300
GAGGGCAGGA	GAGACTGTAT	ATGGAATGTA	AGGTTTGGA	TAACCAATGT	AAGTTTTGGG	360
AATGAGAAAG	CCACCTAGGG	ATGAGGAAAA	AATATTAAAA	ATTTTGTATC	CACTGAAAT	420
TCTTCAACAG	TGTAAATGA	AGCATGCTCA	ACTGGAATG	GTCATATATC	TAAAGAAAA	480
TGGATTTATT	TTGTTATTTT	TCTCTATATT	TGTAAGTATT	TACAGTAAGC	ATGTATTACC	540
TTTATAGTGA	AAAAGTGTCA	TTTTTTTACA	TTGGTCAATT	TTTTGTTATT	AAATTTTCATG	600
CTTGTTTTTA	ATTGTTTCTT	GTGTGTATGA	TTGCAATATC	AGGTATTGTA	TGTGGTGATG	660
TGTGTGATTG	AGAAGTCAGA	AGACTTAAGT	TCCGACACCC	CTCGAG		706

(2) INFORMATION FOR SEQ ID NO:925:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 651 base pairs
- (B) TYPE: nucleic acid

(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:925:

GAATTCGGCC	AAAGAGGCCT	AGGATTCAAA	TTATTCTGAC	AGACCTGTGT	GGCAGTTCAG	60
GCTGATAGCT	GGAGTTTCTT	GTCTTTTCT	ACATGGCCTT	TCATCTTCCA	AGAGTTAGAC	120
TATGATTCTT	CACATCATGA	TGGCTTAGGG	TCCCAAAAAG	AAAAGAGTAG	AACTTGCAAT	180
ACCTCTTAAG	CCCTATGCCC	AAGAACTCAT	ACAGTGATAC	TTCTGCCACC	TTGTGTTAGT	240
CAAAGCAAGT	CACAAGGCCA	GCCAGATTCA	AAAGAATGGA	AAAATAGACT	CAATTCCTG	300
GTGAGAAGTA	GCAAGGTCAC	ATTGCAAAGG	AGTCTGGACA	TGGGAAGGAG	TTACTCATTT	360
GTGGCCTTTA	TAATAATCTT	CCACAAATGC	CTGTAATTTG	GGCACTGTGC	TTAGTACTGG	420
TGATAGAAGA	TAAGTAGCTT	ATTTCAGTAT	CTTAATTTTG	TTTTATATAT	TTGATAATTT	480
TATGATGCAG	GTTCACTGTG	CACTGGTATC	AATCCCAGGG	GAGGACTGTA	AACACCTTGC	540
CAATACTGTG	TACCAGTA.C	AATCCACTGG	CATGAGTCTG	GTGAGACAGA	ACACACAATA	600
AGTTTAGGGA	AGCAACTTTA	TTACTCACAG	ACAGGCAGCA	AGGGACTCGA	G	651

(2) INFORMATION FOR SEQ ID NO:926:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 700 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:926:

GAATTCGGCC	AAAGAGGCCT	AAAAAGATGA	AAGGACCAAT	CAAAGATTTA	ATTAAAGCTA	60
AAGGGAAAGA	TTTAGAGACA	GAGAATGAAG	AAAGAAATTC	TAAGTTGGTG	GTGGACAAAC	120
CAGAACAGAC	AGTGAAGACC	TTTCCACTGC	CAGCTGTTGG	TTTGAAAGA	GCAGCTACTA	180
CAAAGGCAGA	TAAAGACATC	AAGAATCCAA	TCCAACCATC	CTTCAAAATG	TTAAAAATA	240
CTAAACCAAT	GACTACTTTC	CAAGAAGAAA	CCAAGGCTCA	GTTTACGCA	TCAGAGAAAA	300
CCCTCCTAAA	AGAGAACTTG	CCAAAGATTT	GCCTAAATCA	GGAGAAAGTC	GATGTAATCC	360
TTCAGAAGCT	GGAGCGTCTT	TACTGGTTGG	CTCAATAGAA	CCTTCTTTGT	CAAATCAAGA	420
TAGAAAATAT	TCCTCAATTC	TACCTAATGA	TGTACAAACT	ACCTCTGGTG	ATCTCAAATT	480
GGACAAAAAT	GATCCCCAAA	GACAGGAAAT	TCTAGTAAAA	TTACTAGATG	TGCCTACTGG	540
TGATTGTCAT	ATTTCTCCAA	AGAATGTCAG	TGATGGGGTT	AAAAGGGTAA	GAACATTATT	600
AAGCAATGAG	AGAGATTCCA	AAGGCAGGGA	TCACCTCTCA	GGAGTCCCTA	CTGATGTTAC	660
AGTTACTGAG	ACTCCAGAAA	AGAACACAGA	ATCCCTCGAG			700

(2) INFORMATION FOR SEQ ID NO:927:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 378 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:927:

GAATTCGGCC	AAAGAGGCCT	AGGGGTGGTG	GAGGCGTGGA	CCCAACGGTG	ACCGTCGGGA	60
TGGAGCAAGG	GCAAGGAGAG	GCTCTGGCCC	AGACACAGCT	TGGAAAAGCT	CATCTCCCTC	120
TGGGGTTTAA	AAACTCAAAG	CAACGGGAGC	AAGCCTGGCG	GCCCTGGGGA	TGGGGCAGGG	180

CCTCTACCTC	ACTGTGATCT	TCGACCTGGC	GACACAGGAC	AGCCACACAG	AAGCACGCCA	240
ACACACTTAA	AGCTTTGCTC	CAACTAAATC	ATTTAGTTTC	CCTTGAAGAA	ATAACTGAAA	300
AAAAAAACAA	CTGCTGACAT	CTATGTCTGT	AGCTCGATTT	TACAGTCTGC	TCTTTGTGAG	360
AAAGGAAAAT	CACTCGAG					378

(2) INFORMATION FOR SEQ ID NO:928:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 426 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:928:

GAATTCGGCC	AAAGAGGCCT	AATATTTTAC	ATTTCTCTTT	TCTAAAAGTG	TAAATTTTTC	60
ACTTTAAAT	GAAGCAAGAA	TTAAATAAAT	AGAACAAATA	CCATATATCA	TCACAGAGTC	120
AATATATTAT	GGTCCTGTTC	TGACCAAGTG	TTGCATTGTA	TTTGTGTTAC	CAGAACTGCA	180
GGGCTTTCTA	TGGCTACATG	GTCAGTGCAT	GCTCAGACAG	CTGTTAAAAT	CAAAACCTTC	240
ACTGTGCTGG	GTCACCTGGT	AACTACTGTC	TATCTCACAA	GTGCATTCTG	CTGACATTCA	300
AGGGTTAAAC	TGGTTTCTAG	TAAATACTGT	GCTTTAAAGT	AGTACATACT	GTGAGCTGTG	360
TTATTAGAAA	CCTGCTTGTC	CTTGTGTCTG	AAAATAAGGA	GGAACACTCT	CGCACCAAAT	420
CTCGAG						426

(2) INFORMATION FOR SEQ ID NO:929:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 325 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:929:

GAATTCGGCC	AAAGAGGCCT	AGGTAAATGT	TAGTGAAAAA	TTTTATGAGT	ATATGCTGAA	60
AGGAGAGATT	AGTTCACATG	AACTCAATAA	TGTTCAAGAT	AATGAAATGC	TTAGAAAGGT	120
TACTTTTGAT	CCAGAAGTAT	TTTTCAACAT	ATTACTTCCT	CCTATCATAT	TTTATGCAGG	180
TTATAGCCTG	AAAAGGAGAC	ATTTTTTTTCG	AAATCTTGGG	TCTATCCTAG	CATACGCTTT	240
TCTTGGAACA	GCAATTTCTT	GTTTCGTTAT	TGGGTCAATA	ATGTATGGCT	GTGTAACGCT	300
GATGAAGGTA	ACGGGACAAC	TCGAG				325

(2) INFORMATION FOR SEQ ID NO:930:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 406 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:930:

GAATTCGGCC	AAAGAGGCCT	ATGGACACCC	TGTGCCCCAA	GCCGATGGCC	CCACCCAGCA	60
GCATCAGCAC	AGNTGCCCCC	CTTCTCCGCA	GAGCAGGCTC	TCCTTTACGG	GACTCTCCTC	120

TTCCTCCCA	CCTGATGCGC	ATCAGCAGCC	ACGGGCTGG	CCCTTGAATC	TTGTCTAACT	180
GCACTCGTG	CCTGGTGGCC	TCATCCCACC	CCAAGACCAC	TGCACTGATG	GCTCCAACCC	240
CAACTTCTCC	CTGCACTCAG	CTTATGAATA	CGACGGCCCT	CATTGCATCC	ATGCAGAGAC	300
CTCAGAGGCA	GCTCAGCTCA	GTGCTCAGCG	TGGCACTCGG	GGCTTCACAC	TTCCCCCGT	360
GTCTGTCTG	AGAAAAGTGT	GACACCATCA	ACCCAATAA	CTCGAG		406

(2) INFORMATION FOR SEQ ID NO:931:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 246 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:931:

GAATTCGGCC	TCATGGCCTA	CCAGACTGTA	AACATTCCAG	GTCCTGAAAA	AGTGTGGAC	60
CAGTCTCCTA	CTGTATGTT	CTCCAGTTTT	AAAAATGTAA	AATCAGTTGA	AACACTCGAT	120
CAGAAGGCAG	ATGAAGTCCT	TGACTGTCAG	AGTAACCAAA	ACAGACCAGA	TGAATGCAAA	180
AGTGAAGGTC	AGTCAGCCAA	GGAGATGCTA	AGTAGTGACC	AGAGAGAGAC	TGTCACCGGA	240
CTCGAG						246

(2) INFORMATION FOR SEQ ID NO:932:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 278 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:932:

GAATTCGGCC	TTCATGGCCT	ACTCCATTGT	CAGCCAATT	TCCCCTAGTC	CAAGTTTTTT	60
CTTTGCTGAT	TCCTTGTCC	ATGTGTGCTT	TGAGCCTCTC	TCATCTTGTC	TTTCTCTCTT	120
TCCTAGGAGC	AGTCCTGAA	GCAGCAGCAG	CAGCACCAGT	GGCAGCAGCA	TCAACAGGGC	180
TCTGCCCCCTC	CTACCCCACT	GCCCCCATCA	CCACCACAGC	CTGTGACCCT	GGGGGCTGTG	240
CCAGCTCCAC	AGGCTCCACC	CCGCCCCCAC	AACTCGAG			278

(2) INFORMATION FOR SEQ ID NO:933:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 421 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:933:

GAATTCGGCC	TTCATGGCCT	ACGAGTGCGA	CCAGCCAGAT	GAGCGCCCGG	TCCTGGTGAA	60
GAGCATTCAC	TACCTCTACT	TCTCCATGAT	CCTGTCCACG	GTCACCCTCA	TCACTGTCTC	120
CACCGTGAGC	TGGTTCACAG	AGCCACCCTC	CAAGGAGATG	GTCAGCCACC	TGACCTGGTT	180
TACTCGTCAC	GACCCCGTGG	TCCAGAAGGA	ACAAGCACCA	CCAGCAGCTC	CCTTGTCTCT	240
TACCTCTCT	CAGAACGGGA	TGCCAGAGGC	CAGCAGCAGC	AGCAGCGTCC	AGTTCGAGAT	300

GGTTCAAGAA AACACGTCTA AAACCCACAG CTGTGACATG ACCCCAAAGC AGTCCAAAGT 360
 GGTGAAGGCC ATCCTGTGGC TCTGTGGAAT ACAGGAGAAG GGCAAGGAAG AGTCCCGGC 420
 C 421

(2) INFORMATION FOR SEQ ID NO:934:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 449 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:934:

GAATTCGGCC AAAGAGGCCT AAAATAGCAA AGATGGAACA TGGACCTAAA GCAGTGACTA 60
 TTGCAAATTC TCCATCAAAG CCTTCAGAAA AGGATTCTGT AGTTTCCCTT GAGTCCCAGA 120
 AGACACCTGC TGACCCAAAA CTGAAAACCTC TAAGTCAAAC CAAAAAAGC AAAGGATCTG 180
 ATAGCTCACT CTCTGGTAAC AGTGATGGCG GAGAAGAATT TTGTGAAGAG GAGAAGGAAT 240
 ATTTTGATGA TAGCACAGAA GAAAGGTTTT ACAAGCAGTC TTCCATGTCT GAAGATAGTG 300
 ATAGCGGTGA CGACTTCTTC ATTGGGAAAG TCAGACGGAC ACGAAAGAAG GAAAGTAGTT 360
 GTCATTCTTC AGTTAAGGAA CAAAAACCAC TAGAAAAAGT GTTCTTAAA GAAGATACAG 420
 GTGAACTCA TGGGGATACA ACTCTCGAG 449

(2) INFORMATION FOR SEQ ID NO:935:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 421 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:935:

GAATTCGGCC AAAGAGGCCT AAAAATAGTG ATTTTGTGAC TATCTATAGA TATTAGTTGG 60
 CATTCTACTG TAAGGAAAAC TTTCTTTTCT CCTGTACTTA TTCATCGTCC CCCAGGAATC 120
 AGTCATTTTT CCAAGGAGAC CTAGTTCCTT TTTGTGAGGA GTTGTTTTGA GTTCATTTTG 180
 AAGTTCATTT GAAGTTTGA GTTCATTTTA CTATAATCTG CCTAGGTGTG ATTTTCTTTT 240
 TATTTATTCT GCTTAGGATT TGCAGAGATT TTTTGAACC TGTGGCTTGA TGTCCATCAC 300
 TTTTGAAAT TTCTCAGCCA GCATAGTATC TGCAGACTGT GTGTCTGTTC CATTTTCTCT 360
 CTTTCTCCT TGTAGGACTT CATTACAAG GATGTTAGAA CTTTTTACCA TGGCTCTCGA 420
 G 421

(2) INFORMATION FOR SEQ ID NO:936:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 648 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:936:

GAATTCGGCC AAAGAGGCCT ACAGGTCTAC TGGTAATGAT TTCCTTTACC TTCTAATTAT 60

ATAGAAATGT	CATAATTTCT	CCTTTATTCT	TGAATGATAG	TTTTGTGGGA	TATAGACTTG	120
CTGGATATAG	AATTACTGGA	TATAGAATTG	CCAGATATAA	AATTCTTGGT	TCAAAGTTT	180
TTTTCTTTGA	GGACTTTGAA	TGTCATCCCA	CTGTCTTCTG	GCCTCCATAG	TTTCTCATAA	240
TAAATCAGCT	GTTAATCTTC	ATTAAGTTTC	CTCTGTACAC	GAAGAGTCAC	TTGTCTCTTG	300
CTGCTTTCAA	ATTTTCTCA	TTTGCTTTGG	GTTTTCACAC	TTTAATTATA	TGCCTTTCTA	360
TGTGGATCTC	TTTGAGTTTA	TCCTGCTTGG	AGTTCATTGA	GCTTTTGCA	TCTGTATATT	420
AATTTCTTTC	ATCAGATTTG	GAGATGTTTT	TGGCATTAT	TTCCTCAAAG	TTCTTTCTGC	480
TTCTTTCTCT	CCTTCTCCT	CTGGGTCACC	ACAATGCATA	TGTTGGTCTA	CTTGATGATG	540
TCTCAGGT	TCCTTAGACT	CTGTTTACTT	TTCTTCATAT	TTTTTCTTT	CTGTTTCTTA	600
AATTGGATA	ATTTGGTTG	TCTTATATTC	AAGTTTGCTG	ATCTCGAG		648

(2) INFORMATION FOR SEQ ID NO:937:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 160 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:937:

GAATTCGGCC	AAAGAGGCCT	AGAGGATGGG	AAGCTTGGGG	AGAGAAGATA	CTGAAATGCT	60
AGAAACTGAG	CCAGTAGAGG	ATGGGAAGCT	TGGGGAGAGA	GGACATGAGG	AAGGATTCT	120
GAACAACAGT	GGGGAGTTCC	TCTTTAACAA	GCAGCTCGAG			160

(2) INFORMATION FOR SEQ ID NO:938:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 399 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:938:

GAATTCGGCC	AAAGAGGCCT	AGAAAACTC	AGGAAAGAAA	TTGCAGACTT	CGAACAACAG	60
AAAGCAAAAG	AATTAGCTCG	AATAGAAGAG	TTTAAAAAGG	AGGAGATGAG	GAAGCTACAA	120
AAGGAACGTA	AAGTTTTTGA	AAAGTATACT	ACAGCTGCAA	GAACTTTCC	AGATAAAAAG	180
GAACGTGAAG	AAATACAGAC	TTTAAACAG	CAAATAGCAG	ATTTACGGGA	AGATTGAAA	240
AGAAAGGAGA	CCAAATGGTC	AAGTACACAC	AGCCGTCTCA	GAAGCCAGAT	ACAAATGTTA	300
GTCAAGAGAGA	ACACAGACCT	CCGGGAAGAA	ATAAAAGTGA	TGGAAAGATT	CCGACTGGAT	360
GCCTGGAAGA	GAGCAGAAGC	CATAGAGAGC	AGCCTCGAG			399

(2) INFORMATION FOR SEQ ID NO:939:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 519 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:939:

GAATTCGGGC	AAAGAGGCTA	GAAGCATCGA	AAGCGTTGGA	GAGGTGTTAC	CGGTAACGGC	60
GGCGAGAAGG	GTGTTCCCGA	ACTAGAGTGG	GGCATAACATA	ATCTTGCTGC	TATGCTTCGA	120
AGCTGTAGTC	TGAATCAACC	TAAGTTTAA	ACAGAAGGTG	AACCTCTGAG	ATAGAAAATC	180
AAGTATATTT	TAAAAGAAGG	GATGTGGGAT	CAAGGAGGAC	AGCCTTGGCA	GCAGTGGCCC	240
TTGAACCAGC	AACAATGGAT	GCAGTCATTC	CAGCACCAAC	AGGATCCAAG	CCAGATTGAT	300
TGGGCTGCAT	TGGCCCAAGC	TTGGATTGCC	CAAAGAGAAG	CTTCAGGACA	GCAAAGCATG	360
GTAGAACAAC	CACCAGGAAT	GATGCCAAAT	GGACAAGATA	TGTCTACAAT	GGAATCTGGT	420
CCAAACAATC	ATGGGAATTT	CCAAGGGGAT	TCAAACCTCA	ACAGAATGTG	GCAACCAGAA	480
TGGGGAATGC	ATCAGCAACC	CCCACACCCC	CCCCTCGAG			519

(2) INFORMATION FOR SEQ ID NO:940:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 268 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:940:

GAATTCGGCC	AAAGAGGCCT	AAGAAATTAT	ACCATTTTAT	GGAATGTCAA	GCTACATCAC	60
CCGAGAAGAC	CAGTACAGCA	AGCCTCCGCA	CAAAAACTG	AAAGACCGCC	AGATCGATCG	120
CCAGAACCGC	CTCAACAGCC	CTCCTTCTTC	TATCTACAAA	AGCAGCTGCA	CAACAGTATA	180
CAATGGCTAT	GGGAAGGGCC	ATAGTGGTGG	AAGTGGCGGA	GGCGGCAGCG	GTAGTGGTCC	240
CGGAATTAAG	AAAACAGAAG	CGCTCGAG				268

(2) INFORMATION FOR SEQ ID NO:941:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 535 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:941:

GAATTCGGCC	AAAGAGGCCT	AAGCCTCGCC	TTACACTTAA	GTGCACCCGA	TCCTGCCTCT	60
GGCATCTCAC	AAACGTCACT	CCCTGGAACA	AATTTGTGAA	GGCCTCCAGA	CCACAGTGTC	120
CTCATCTGTA	AAATGGGGGT	AGTAGTAATC	CTTGCCCTCAT	AAAGTTCTTG	GCAAGGATTA	180
GATGAGCGAG	CATGTGAGTT	TGGCCTCCGT	TAAACACTC	CATAAAGTTT	CCTTTTAGGA	240
TAACAGCAGG	CCGTTT TAGA	ACCTTCCAGA	GGTTACTTAT	TCAGATATCC	TTAGGTGACG	300
ATTGGGAAGC	TGCCGTTTCT	TGAGAGCCTC	CTGGGTGACA	GATGGAGAGT	GGCCCTGGCG	360
TGACCCTTGA	CCCTATCCTT	GAGGCTTTCC	TGCCCGTCTC	CTGCCTCGAA	TGTGCTCCCG	420
AGCACATGGA	TCAGGATGGG	GAAGGGGCTG	TGTCACTGGA	TACCTTCGGC	CCCTGCCAC	480
GTCTAGGGCC	TGTGAAAACG	AGGAGGGACA	GCAAAGAAAT	GGGGAAAGGC	TCGAG	535

(2) INFORMATION FOR SEQ ID NO:942:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 316 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:942:

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GAATTCGGCC AAAGAGGCCT AAAATTGTTA ATTCTAGTCA CCCTGCAGTG CTATAGAACA      60
CTGGAACTTA TTCCTCCTAT ATCACCGTAT TTTTGTATCT ATTAACAAAC CTCTCCATAT      120
CCTCCCTCCC TCCTACCTTT CCAACCTTT GGTAATCACT ATTCTCCTCT CTACTTCTAT      180
GAGATCAATG TCTTTATTTA CTCGAAGTAC TCTTAAAAGT TTAGGACTTA AGTATTTGAA      240
GAAATTCAC TGCCTTTTGT TTTTATTCTA CTCAATACTT TTTAATATAA AGATTTACAG      300
TCCCCCTTA CTCGAG                                     316

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(2) INFORMATION FOR SEQ ID NO:943:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 363 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:943:

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GAATTCGGCC AAAGAGGCCT ACAAACTCAA GATGCCCCGAG TGGATTGGAG GCGAGAGCGA      60
GCTCAGGAAG TTTCTAAAAC ATCATTTCG AGGAAAGAAC TGTGAACTCC TGCTGGTGGT      120
ACCAGAAGAG GTAGAGGCTC ATCAGAGTTG GAGGACCGAT GTGTAACAGT TCTGCCAAC      180
CTCCCTCTCG CTCAGCCCC TTCAGTCCTC TGTGACGTGC TGTGGCCTCT ACAGTGGGTC      240
TGCCCTTGCC ACTTCCCCAA ACATCTCATC AAGTTTTTCC CCTTCAGATC TGACAGTGCA      300
ATAGGACAGA CGTGTGGACT GTTATAAGAA CTAATCAGTG TTTGTTCCT GGGCAAATC      360
GAG                                     363

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(2) INFORMATION FOR SEQ ID NO:944:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 324 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:944:

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GAATTCGGCC AAAGAGGCCT ACTCTGACAG TGTTTCTGAC CTTTAGCATT TCTTTTGTAT      60
TCTTTCTTAG AATTCTCATC TTCTGCTTAT ATACCTGTCT ATTCTTGCAT GCTGTCTACG      120
TTTCCCATGA GAGTCCTTAG CACATTAATC ATGGTTGTTT TACATTACAC GTCTGGTAAT      180
TCCAGCATCC CTGCCACATC TGAATCTAGT TCTGATGCTT GCCCTGTCTC TTCAAATCT      240
GTTTTTTTGC CTTATAATCT TTTGTTGAAA GCCGAACATG ATTCCTGTAC TGGCTCTTCT      300
GGAGGCTTCT GCCCTGTTCT CGAG                                     324

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(2) INFORMATION FOR SEQ ID NO:945:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 712 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:945:

GAATTCGGCC	AAAGAGGCCT	ACAGATGACT	TCATTTCTCT	TGGATTCCAC	TTTCTCACGT	60
GTCAGAATGG	GAGAGGAAGG	GAGGTGTTGG	GATAAGTTTC	AGTTCCACTG	TTTGTAATTC	120
TCGTCTGGCT	AACACCCATG	TGGCAAATAG	GTTTCATCAT	TTGTTTCAGC	TTAGATTTGT	180
TGACAGCGGT	TTCCTGGAGT	GCTGTCTTGA	GAACGATTCT	GAGGAGGCTC	AGCAAGAAAG	240
AGTGTTCAG	TTGATTGGGT	GTGTCTGTCA	TGGAGAAGGA	AGTAAGGAGT	GGGCAGTGCT	300
AGCAAAATTC	CCGGGGCACT	TCTGTCCATT	ATCTCAATAC	CTGGGGTTGA	CATTTCTGT	360
CTCAGATCAG	GAGTCCTGAC	TACCCTGCCT	CTGACCACTC	GAACTGAGTG	CTGCTTAGCT	420
GTATCGTAGA	CACCGCCTGT	TTGTGAACAG	ACACCCTGCT	TCTTGATAAC	ACAAAGGCCA	480
GCAGGGTCCA	CTGCTGTGTG	GAATGGCCTT	CGGTCAATTC	TGCCCAGAGC	ATAGAGGTCA	540
TTTTCACTAA	TAACATAACT	CTCCTTTTGA	TTGAAAGTGT	TAAAATGTTC	CTCCTAAAAG	600
CACTTATTTT	TTAGGCTCGT	TCTTCAGATT	TGCCCATAT	CCTAAGCAAA	ATGCCTTCAA	660
TATGAAGTGG	ATATTGCTTG	ACCGTAGGGA	GCTTGTCCAT	ACTGTACTCG	AG	712

(2) INFORMATION FOR SEQ ID NO:946:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 305 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:946:

GAATTCGGCC	TTCATGGCCT	AGTCTTGAAG	GATAAGACTT	GCCCAAGTGG	ATAAGGGGCG	60
AAAGGCATCC	CAAGAGGAGA	CAGTAACGTG	TGTATAAATG	AACGAAGGCG	TGAAATAGGA	120
TGGAGTGTTC	TGAGGAACCA	CAAGTAGCCT	TCTCTGAGTA	AGAGCATAGG	TTTGTGAGGA	180
GGACCTAGTG	TTGTTTGAAA	AAAGAGAGTG	ATCAATGGAA	GATGAGATAT	CAAGACAGGA	240
GAACCAAGGA	AGAAAAAGCA	GAGGACAGCT	GGAATGAATC	AAACCGAAGA	ACCAGGATCC	300
TCGAG						305

(2) INFORMATION FOR SEQ ID NO:947:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 321 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:947:

GGGTTTTGTT	AATGGAAAGT	TTAAGTAAAT	TATATTGTAA	TAAAAAGGTA	GATAAACCAT	60
TGTACAACAG	TATTCTAGGC	CGCCAACAAA	AGTGTGACAG	ACACACTAAA	AGCCCTCCAA	120
CTTTAACTTG	TAACGTAGCT	TCATTCTCAA	AGCTGACTCC	TTTTTTTCT	TTTTCCTTTT	180
CTTGAGTGTA	GTACAGTTAA	AATTTCAAAC	AGCTCCTTGA	CACTGCTTTT	CATGTTCAAA	240
CCAGCCATTT	TGTTGTACTT	TGGTAAAGGA	CCTCTTCCCC	TTCTCTCCCT	ACACATACAG	300
ATACACCCAC	CATAACTCGA	G				321

(2) INFORMATION FOR SEQ ID NO:948:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 312 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:948:

GAATTCGGCC	TTCATGGCCT	ACAAAAGGCA	ACAAACAAGA	TTAACATGGA	ATTATAAAAA	60
TCACTCAATC	CAAAATAAGG	CAGAAGAAGT	GGAAAAGGGA	GATGAAGATC	AGATGGAACA	120
AAGAATATTA	CTAGAAATGA	CTATGTTT	TAATGCAAAA	TAGTTCAGTA	CAGGAGAAAG	180
ATACAATAAT	TTGAGTGCAT	ATGAACTTAA	AAGAGAATTT	CAAAATATAT	GAAGCAAAAA	240
TTGACAGAAC	CCAAAAGGCA	ACAAACAAGA	TTAACATGGA	ATTATAAAAA	TCACTCAATC	300
CAATATCTCG	AG					312

(2) INFORMATION FOR SEQ ID NO:949:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 291 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:949:

GAATTCGGCC	TTCATGGCCT	ATAGGCCATG	AAGGCCGGA	GCCTCAAGAA	AAATTAGCAG	60
AGGAAAATAA	TAGGTAGTTA	CTATTAGGG	TAACTAAAC	TGTTCTAAGG	AATAGAAAAT	120
AAAAATTCCA	TGTCTTCAA	AATAATTCTT	CCCTCTCAAT	CTCTCTGAAT	ATCTCATAAG	180
AGTATTCAAG	CCACAGAAAT	AACTACCATT	TAGCCACTCA	GAGGCTTATA	GTAGTTCTAC	240
TAACTTTAAC	ATTTGGCAAC	CAAAATTACT	CTAAGAATCA	TCACCCTCGA	G	291

(2) INFORMATION FOR SEQ ID NO:950:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 240 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:950:

GAATTCGGCC	TTCATGGCCT	AGATGGGCAT	TCTGTTTATC	TTACTAGTAG	TACGCAGGGT	60
ATGTTGAAAT	CTCCAAGTGT	GATGGTGGAC	CTGTCAACTT	CTCCCTGTGG	TTTATCAGT	120
TTTTCCTGGG	TATTTTGAGG	CTATTCTGAT	AGGTACATAA	AATACAAAAA	TTGCTATATC	180
CTCCTAATTA	ACACTTATTA	TCAAATTGTT	ACTAATGCTT	TCTGTTCTTA	GGCCATGAAG	240

(2) INFORMATION FOR SEQ ID NO:951:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 404 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:951:

GAATTCGGCC	TTCATGGGCT	AGATCTGAGC	TCACTGCAAC	CTCTGCCTCC	AGGGTGCAAG	60
CCATTCTCCT	GCCTCAGCTT	CCCAAGTAGC	TGAGACTACA	GGCGTGTGCC	ACCACGTTGG	120
CTAATTTTGT	TATTTTGTAGT	AGCTTTTTTT	TTTAAACCCT	GAGTGTGAGG	TGTGAGGTAG	180
TAGAAGAAAG	GTAGTGTTGT	TGACAGCTTG	TGAGTACTTA	ACTAATTCTT	GTTGCATTCA	240
CTATAATATG	GTAGTTGTGT	ATACATTAT	AGGCAATTAG	GAATAGGGAA	CAGAATCAGC	300
AGATACTAAC	GGAGTTAGAG	ATGTTTGCTG	AAGTCATGGA	AAGCCATCAT	TACTTTTTTC	360
TTCCTTCCTC	ATAAGGCCTT	AGTGGGTGTG	GCGTTCAGCT	CGAG		404

(2) INFORMATION FOR SEQ ID NO:952:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 382 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:952:

GAATTGGCCT	TCATGGCCTA	GAAAAATCAT	GTGGGAAAAC	CACTGCTGAA	AATGGATTTA	60
AATTCAGAAC	AGGCGGAACA	ACTGGAAAGA	ATCAATGATG	CTCTTTCCTG	TGAATATGAG	120
TGCCGCCGAC	GAATGTTAAT	GAAACGATTA	GATGTGACTG	TACAGTCCTT	TGGATGGTCT	180
GATAGAGCAA	AGGTAAAAAC	AGATGATATA	GCAAGAATTT	ATCAGCCTAA	GCGTTATGCT	240
TTGTCACCCA	AGACAACGAT	TACAATGGCA	CATCTACTTG	CTGCTCGTGA	AGATCTATCC	300
AAGATCATT	GGACAAGTAG	TGGCACCAGC	CGGGAGAAGA	CCGCATGTGC	CATTAATAAG	360
TGCTGATGG	GAAGGGCTCG	AG				382

(2) INFORMATION FOR SEQ ID NO:953:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 268 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:953:

GAATTCGGCC	TTCATGGCCT	AGTCCCTCTT	CCACTGCATT	TGGGCTTCAT	ACATGCACAT	60
GATGTCCTCC	TCCTTGCACT	CAGTGATGTC	TGGCAGCGCG	CGGTACTGCC	GGTGGTAGTA	120
GTAATACCTG	TTCTTTGCGT	GCTGCCGCTC	TATAAATTCT	CTCACGAGGG	TCACGGGTCG	180
GTCCACGATG	AGGTGGAACG	CTTTCATCAT	GTAGACGATG	GGATTGGGCT	GCACCGGCGT	240
GCGGCGCGGG	GGCTCAGGCT	CGCTCGAG				268

(2) INFORMATION FOR SEQ ID NO:954:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 260 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:954:

GAATTCGGCT	TCATGGCCTA	AAGATTCTGC	TCTTTATACA	CAGAACTTGT	TATAGAGTTC	60
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TGGAATGAGG AAGTGTGAGG AGGGAATCAG TGCCTCTCGG AAGTCGTTTT AATTAGAATG	120
TGATTTTTTT TTCTTAAACG TGTCTTCATT GGCTCCCAGA TTGCCGTAG AAACCAAGCA	180
AACTGGGTGC TAAAACAGAA AGGCCCATAG ATTGTACTTT TTGAGCTGTT TGAATTTGTA	240
TACCATATGC ACAACTCGAG	260

(2) INFORMATION FOR SEQ ID NO:955:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 129 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:955:

GAATTCGGCC TTCATGGCCT AATCCGAGTG TTTGCGCAC GTCCTAAGCT GACAGTCCCT	60
CTGGACAGAG TCCCTGGAGT GGAGTCACTG CTCCTGTCT TTTTTCATA ACATACACTC	120
ACCCGTATG	129

(2) INFORMATION FOR SEQ ID NO:956:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 404 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:956:

GGCTAAACAT GGAAATGAAA GACTGATACT TGCTACCACA AAAANANACT TAAGCACATA	60
GATCATAGAC AGTATAAAGC AATTAGACAA TGAAGTCTAC AAAACAACCA GTTAACAACA	120
CAATGAGAGT ATCAAAATCT TACATGTCAA TACTAACCAT GAATATAAAT GATCTAAGCC	180
CCCCACTTAA AAAGCATAGA GTGGCAAACCT GGATAAAGAG ATAAGACCCA ACTGTCTGCT	240
GCCTTTGAGA GACCCATCTT GCATGTAGTG ACACCCACAA GCTGAAAGTA ATGAGATGGA	300
GAAAGATCTA TCATGCAAAA GGAAACAAA AAAGAGCAAG TATCACTATT CTTATATCAG	360
ATAAGACAGA TTTTAAACCA ACAACTATCA AGAAGAACCT CGAG	404

(2) INFORMATION FOR SEQ ID NO:957:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 283 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:957:

GAATTCGGCC TTCATGGCCT AGACTCTCTT TATACAATTC ATCAAGGTTA AACAAAACAT	60
AAAATTCCTT TAAAAATAGG GTAATAAAT AGATGAAAT TGTATCACTC AATTTGGTGA	120
TACTAGTAAA AACTATAGTT CATATTTATA TACAAATAAT ACAGTCTGTA AAAACAGTCT	180
TAGAATTTAA ATAAGCTATC TAAACGTGTT AAAATTTTAA ATCAGGACCT GATTTGTTTT	240
GCTTTCCATT AAATGTCACA TTGAATTCTA GACCTGCCTC GAG	283

(2) INFORMATION FOR SEQ ID NO:958:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 309 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:958:

CTCGAGGACC TGGTCGTGAC CAACTATAAG ATGGGGGGGC GACATTGCCA ATGGGGTACT	60
TCGGTCCTTG GTGGACGCAT CTAGCTCAGG TGTGTCAGTA CTGAGCCTGT GTGAGAAAGG	120
TGATGCCGTG ATTATGCAAG AAACAGGGA AATCTTCAAG AAAGAAAAAG AGATGAAGAA	180
ACGTATTGCT TTTCCACCA GCATTTGGT AAATAACTGT GTATGTCACT TCTCCCCTT	240
GAAGAGAGAC CAGGATTATA TTCTCAAGGA AGGTGACTTG GTAAAAATTA GGCCTCTTTG	300
GCCGAATTC	309

(2) INFORMATION FOR SEQ ID NO:959:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 149 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:959:

GAATTCGGCC AAAGAGGCCT AGATTGAATT CTAGACCTGC CTCGGACTAC TGCAAGTGCT	60
TAAAGGCATT ATTTATAGA CCTTACAAC ACCCATATAA CATTATTATC TTCATTTTAC	120
AAATGAGGAT AATAATGTTA TATCTCGAG	149

(2) INFORMATION FOR SEQ ID NO:960:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 455 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:960:

GAATTCGGCC AAAGAGGCCT ACACCGTAAT ACTATAATAC TATATAATCT GTTTGTTAAT	60
TTTCTGAGAA TAATAACTCA ATGGAGTAAC TCTTTAATAG GCATCTTTTC CTTATAAAAA	120
ATATTGTAGA TTGGCTCTCT GCAAGCTAAT TTCTTTTATA TGGTTAATAT TTTAGTGTAC	180
ATTAAGAGCT TAGAGTTCTT TTTGTAATCA AGCTTGCTAC AGAAGCTGTG CTTTATTTAT	240
TTCATAGTAA TTTCTCTAG TGGGTCATTG TATAAACCCCT GATCATTTT GTATGTCTAT	300
TCCTTTTCTT GCGAAGTGGG CAGCTTGTTT AGCCATGGTG TTTTGGCTTC AATAGTGAGG	360
TCTCTATTG GGAATCTCTG AATTTACAG GAATGAGTAG AACTATATT AACAAATGAA	420
AAATAGTAT TAGATTTTAG GGCAGCTGGC TCGAG	455

(2) INFORMATION FOR SEQ ID NO:961:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 207 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:961:

GAATTCGGCC AAAGAGGCCT ACCCTGTCTT TATGCTCCAA TGCTTCTTTC TCCAGATATG	60
AAAGGAGATG CTCTCTATCA AATGGCCCTG TGGTGGACTT TGATGTCTGG TTCTTCTGCC	120
GGAACCCCTGC TGGCTTTTTC CTGTAGCTCC ACATTCCTGT GCATTGAGGG GTTAACATTA	180
GGCTGGGAAG ATGACAAAAC TCTCGAG	207

(2) INFORMATION FOR SEQ ID NO:962:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 247 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:962:

GAATTCGGCC AAAGAGGCCT ACTGTAGTAT TTAATATCT GTTACAGGTT TCCAAGGTGG	60
ACTTGAACAG ATGGCCTTAT ATTACCAAAA CTTTATATT CTAGTTGTTT TTGTACTTTT	120
TTTGATACA AGCCGAACGT TTGTGCTTCC CGTGCATGCA GTCAAAGACT CAGCACAGGT	180
TTTAGAGGAA ATAGTCAAC ATGAACTAGG AAGCCAGGTG AGTCTCCTTT CTCCAGTGA	240
TCTCGAG	247

(2) INFORMATION FOR SEQ ID NO:963:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 472 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:963:

GAATTCGGCC AAAGAGGCCT ACAAGAACAT GAAACATCTG TGGTTCTTCC TTCTCCTGGT	60
GGCAGCTCCC AGATGGGTCC TGTCCCAGGT GCAGCTGCAG GAGTCGGGCC CAGGACTGGT	120
GAAGCCTTCG GAGACCCTGT CCCTCACCTG CGCTGTCTCT GGTGGCTCCA TGAATAGTCA	180
CTACTGGAGC TGGGTCCGGC AGCCCCCAGG GAAGGGACTG GAGTGGATTG GATATATCTC	240
TGACAGGGGG AGCACCAACT ACAACCCCTC CCTCAGGAGT CAACTCACCA TATCACTAGA	300
AACGTCCAAG AACCAATTCT CCTGAATTT GTTCTCCGTG ACCGCTGCGG ACACCGCCGT	360
ATATTACTGT TCTCGTGGGA CATCCCCCCC CCCCTCCTAC TACTACTCCA TGGACGTCTG	420
GGGCAAGGGG ACCACGGTCA CCGTCTCCTC AGGGAGTGCA TCCACCCTCG AG	472

(2) INFORMATION FOR SEQ ID NO:964:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 303 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double

(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:964:

GCTCGGCTCG	CTGCAACCTC	TGCCTCCCAG	GTTGAGCGA	TCTTCCTGCC	TCGGTCTCCC	60
AGGTAGCTGG	GACTACTGGC	GTGCGCGACC	ACGCCAGCT	AATTTTTTGT	ATTTTATAGT	120
GAGACGGGGT	TTCACCATGT	TGGCCAGGAT	GGTCTCAATC	TCTTGACCGC	GTGATCTGCC	180
TGCCTCGGCC	TCCCAAAGTG	CTGGGATTAC	AGGCTTGAGC	CACCGCATCC	AGCCAACATT	240
TTTCAAATAG	AAAATCTGAA	GCTAAAATCA	CCCCTAAAGG	ACAAATAACA	GGACTATCTC	300
GAG						303

(2) INFORMATION FOR SEQ ID NO:965:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 281 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:965:

GAATTCGGCC	TTCATGGCCT	ACTAGATTAT	GGATTTTTTT	ATTTCAATGG	AAGTGAAGTT	60
CAAAGATGCC	AGAGTGGTAC	AGTTCGAACA	AACTGCTTGG	ATTGTCTTGA	TAGAACAAAT	120
AGTGTGCAGG	CATTTCTTGG	CTTAGAGATG	CTAGCTAAAC	AGTTGGAAGC	TCTTGGTTTA	180
GCTGAAAAGC	CTCAGTTGGT	GACTCGCTTT	CAAGAAGTTT	TTCGGTCAAT	GTGGTCCGTG	240
AATGGTGATT	CAATCAGTAA	GATATATGCA	GGAAACTCGA	G		281

(2) INFORMATION FOR SEQ ID NO:966:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 454 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:966:

GAATTCGGCC	TTCATGGCCT	AGACGTGATG	TGTTGAGAGA	AGAATGTTCT	AGGCAGAGGC	60
AACAGCAGAT	GCAAAGGTCT	GAAGGGGAGA	CAGACCGAGC	TAGAAAAGCA	TGGCACATCA	120
GTGATCTAAG	TTCGTGTGGT	TTCCTAAGGT	TGGAACCTAG	GGTGCAAAC	GAGGATGGGC	180
AGATGAGGTG	GAAGAGGAAG	AGCAGACCCA	GGTCACAAAG	ATCTTTTGTG	CTAAGGATTT	240
TTAAGCAGGT	AGGAGGAGAG	AGAATATGAG	CCTTGGGATT	TGAACTGCTG	TGGGTGTACA	300
GAAAAAGAGA	AACTCAACGA	GAGGTTTAGG	TTTAGGGACG	TGGTAGGCTT	TTGCAGTAAG	360
GGACAAGGAC	AGAAGGCTCA	TCTGAGGATG	GGAGGGACAC	TTTAGAGGCA	AATCCATAGG	420
ATGCAGTGGC	TGAACAGAAA	AGGTGAATCT	CGAG			454

(2) INFORMATION FOR SEQ ID NO:967:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 322 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:967:

GAATTCGGCC	TTCATGGCCT	AGTCATTTAA	TTAACTTAG	CAAACTCCA	ATAGTGTAAG	60
TTAACAGATT	TTGGAACTG	GTTTAAAGTA	GATGTATTAT	AACATAAAAC	AAAGCTAGCC	120
ATTATCAAGT	TATTTCTTG	TTAGCTATTT	TTACAGCATG	TGCATGTTAG	GTAGTCATCG	180
TGAAAGCAAG	AATCTTAAGT	TAAATACATG	TTTTTTTGT	TGTTTGTGT	TACTGCTGTG	240
CTGTATAATA	CATGATGCTG	TTAGCAGCGG	AACGTATCAG	AGACACGGCA	CCAAAGTATG	300
TTACTGTCGG	CGAAACTCG	AG				322

(2) INFORMATION FOR SEQ ID NO:968:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 478 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:968:

GAATTCGGCC	TTCATGGCCT	AGACTGCTGG	CATATCCACC	CCACCTGTGC	TGCTGCCCCC	60
GCCAATCCAT	CAGGGCAGCT	CCGACTCCTG	CAGCACCCAC	CGCCCAGGAC	GTCAGCTACT	120
CAGGTTTTCT	GGCTGCTGGG	GTTCCGCACG	AATGGGCCCT	TCTTTTGGGA	AAATGCCAGG	180
GAAGGGGAAC	GGCTGGGCTC	GGGCGCCACA	GCTTGTCCTT	CCAGCCAGCA	GGCACAGATG	240
TATGGCGCAG	GAGGGACAAC	TGGCCCCTGT	GGCCAGCCCC	AGAGAGACGG	GCCCTTTCTT	300
TGGGACCCTG	GCCTCAGAGG	CCTGCGTGTC	ACAGCTCAGG	GTCTGGCTGG	GCAGGGGCAA	360
AACCTGCCTT	ATTTGCCAGA	TGTCCAGAA	GTACACAGGA	GCAGACGCAC	CACTTCGATG	420
GCTATTTTAG	GAGGCTGGTG	ACAAGCAAGG	CATGGTGGCA	GGAAGCCAGG	CCCTCGAG	478

(2) INFORMATION FOR SEQ ID NO:969:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 484 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:969:

CTCGAGGTCC	CTGTCCTGCT	CAGTTTCTCT	TCAATGTGGA	AGTCCTGGGA	GGTCAGTCTC	60
ATGAGAATAA	GGTGCTGTAC	TTTCACAGCC	TTCTCAGACT	TTTCTGAGGA	TGGCCTTACA	120
CTTGCCAGCT	AGTGGAGTGA	GCAGAACTCC	TCCTGGTTTC	TGTGGCTGTT	CTCAGAAATGC	180
CCTAGTTCAC	TTTCCAGTAA	TACTTTTTTG	GGAACATTTT	GTGTTTCTCA	TTTTCTCAGG	240
TCCCCCAGGC	ACACCATCTT	TCCTCTGCTT	CCTCTCACAC	AGGTGCTGAT	ACTGTGTAGG	300
TTTGGGGCTG	TTGTTCTGGC	CCACTCCCTG	ATATTTTCTG	GGTTTGTAC	CTAGTTTTCT	360
TAAAAGTATC	ATCTACATGG	TTTTGGTTTC	ACTATCTATT	CTGTCTTTAT	TTGAACACTA	420
GGGGAAATTC	ATTATGCCAA	TCTCACACAT	TGTGTGATTG	CATTAGGCCA	TGAAGGCCGA	480
ATTC						484

(2) INFORMATION FOR SEQ ID NO:970:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 540 base pairs
- (B) TYPE: nucleic acid

(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:970:

GAATTCGGCC	AAAGAGGCCT	AGGCAAAATG	AAAATACTTG	TGGCATTCT	GGTGGTGCTG	60
ACCATCTTTG	GGATACAATC	TCATGGATAC	GAGGTTTTTA	ACATCATCAG	CCCAAGCAAC	120
AATGGTGGCA	ATGTTAGGA	GACAGTGACA	ATTGATAATG	AAAAAATAC	CGCCATCATT	180
AACATCCATG	CAGGATCATG	CTCTTCTACC	ACAATTTTTG	ACTATAAACA	TGGCTACATT	240
GCATCCAGGG	TGCTCTCCCG	AAGAGCCTGC	TTTATCCTGA	AGATGGACCA	TCAGAACATC	300
CCTCCTCTGA	ACAATCTCCA	ATGGTACATC	TATGAGAAAC	AGGCTCTGGA	CAACATGTTT	360
TCCAGCAAAT	ACACCTGGGT	CAAGTACAAC	CCTCTGGAGT	CTCTGATCAA	AGACGTGGAT	420
TGGTTCCTGC	TTGGGTCACC	CATTGAGAAA	CTCTGCAAAC	ATATCCCTTT	GTATAAGGGG	480
GAAGTGTTG	AAAACACACA	TAATGTCGGT	GCTGGAGGCT	GTGCAAAGGC	TGCACTCGAG	540

(2) INFORMATION FOR SEQ ID NO:971:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 289 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:971:

GAATTCGGCC	TTCATGGCCT	AGCCAGTCTC	AGCACTTAAA	CAACCAGGTG	TTGAAGGACT	60
ATGTTCCAAA	GAACAGAAGA	GAGTATGGTT	TGCAGATGGT	ATATTGCCCA	ATGGTGAAGT	120
TGCAGATACA	ACAAAATTAT	CATCTGGAAG	TAAAAGATGT	TCTGAAGACT	TTAGTCCTCT	180
CTCACCTGAT	GTGCCTATGG	TAAGGAATTC	AAAGAATACT	TAATTGACTA	AACAAAATTT	240
TATTTCTGAT	ATAATTCCTG	GTGTGATTAT	TAGAGTGCTT	TTTCTCGAG		289

(2) INFORMATION FOR SEQ ID NO:972:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 418 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:972:

GAATTCGGCC	TTCATGGCCT	AGAGCTTGCG	AGGTTGAGGC	TGCAGTGAGC	TATGAGCTGC	60
ACCACTGTAC	TCCAGCCTGG	GTGACAGGGC	AAGACTCTGT	CTCAAAAAAC	AAAAACAACA	120
ACAAAACTT	TATTCCTAAA	AAGTGCTGAC	CCAGAGATAA	GAAGCAAGCA	CATGGTTGGT	180
AAAATGACAT	CAGTGAGCTT	GCTTTATGCA	GGGTTGCCCC	AAACCTTCAA	TTTGTAATAAC	240
TCAAAATATC	TGGAAGCTT	GGTGAGGCGA	GGCGGGACTG	TAACTCAGCA	CTCACCGCAG	300
GGTGAGACCC	TTAGGGCAGC	GGGTGCTACA	CTGAACAAAG	CGGTGAACAG	CCCCCTCGTG	360
AGAGGGGGTT	CTTGCCAGAT	GACGCCAGCA	GCTGACAAAC	AGGCAAGTGC	AACTCGAG	418

(2) INFORMATION FOR SEQ ID NO:973:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 276 base pairs

(B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:973:

GAATTCGGCC TTCATGGCCT AGATTTGTAA AAGATTTTCC TAGATTTACT GTGTTCTGGA	60
TCTAGCTTGA ACGTGAATGT TTGTATAGTA CGTTTTCTTA ATATTTTSTA GTATTCATAG	120
TATATAATCA TACTAAACTT GAGAACTGG AAGAATCAAG TCTTCCTCAG TTCTGTTTAG	180
ACTTTCTAGT TTTTSTTAAG GATACTTCCA TATCTTCTGT AAGCTACACA GTGAGCTTCA	240
TTTTTGACA GTTATAATAC ACTCTCGAAT CTCGAG	276

(2) INFORMATION FOR SEQ ID NO:974:

(i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 379 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:974:

GAATTCGGCC TTCATGGCCT AGGGTTCGAT GATAAGCACA GCGGCAGCT GGATTGCAAG	60
TGGAGTGGTA ATGGCCAGAA CAGCCTCTTT CTGTTTTGCA TTTAGTCGAG GATCCAACTG	120
TTCATCCCAT TGTCTGTTAG GACTCCATGG TATGGTGGGA GTCATACTGA TGTCTGGAAG	180
CAAAACCCCA TTGTCCTTGA TCCTGTCTAG TGCATAGTGC ATTTACACAGA GGGGTAATCG	240
ATTTAATTGA AACTGAAGTT CAACCTGTGT GTCACAGTCA GGCCGAAGAT TAAGTTCTTC	300
ACAGCATTCC CTAGATAGCC TTAATAATAT ATATTCCTTT GTTTTTTCTT CAATAGTAGC	360
TTCTAGACC TGCCTCGAG	379

(2) INFORMATION FOR SEQ ID NO:975:

(i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 417 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:975:

GAATTCGGCC TTCATGGCCT AAGAGAAAGA GAGTGAGAGA GAGAGAGAAA GAGAGAGAGA	60
GATGCTGTTG AATCAGAAAC AGATCAACAG CCCAAAGATT TTCCTGTCCC TGGAGTGCCA	120
GCCCCAGGAA GCTCCAGGGC TGAGTGGTCA GGAGCCAGTT TCTCCAGCCC CTCCTCCCCA	180
CAACCCCTAG TGGGGAGGGG CAGCTGTCCA TTTGCCCAAA GTATTAATGC AACTGAAGCT	240
GTGATATTTT CAACGACTGT AGGAGGAAAA ATTAAGGGGA GAGAGGAAAA CAAAACCAAC	300
CAACCCCTAA AATCATTTTC TTATTGTACA TAACGACCTC ATTCTCCTGT ATATGCGGAA	360
GATATAACCT TATATTGGT AAGTGTCTT TGTGCTATTT TATCACGCGA CCTCGAG	417

(2) INFORMATION FOR SEQ ID NO:976:

(i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 154 base pairs
 (B) TYPE: nucleic acid

(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:976:

GAATTCGGCC TTCATGGCCT ACACAGAAAA ATTTCAACAA TAAAAGTTCT TAATTATGGG	60
AAATAGTTAC ATGTGTGTTA TATCATTTAT GGCTCATTTT GTATTTTAT TTAAAAGTAT	120
TAAAATCCCA ACAGTAACAG CAATACAACG CGAG	154

(2) INFORMATION FOR SEQ ID NO:977:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 252 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:977:

GAATTCGGCC TTCATGGCCT AAATTGTTCT TTGCTCAAT AACTGTAA ATTTATCTTG	60
GCAGACTCTA TTTTGATCCC CAAATTTGAT TTAGATTGG GGCCATTAA TTCACTATT	120
TAATAATAAC CCTACTGGAT GAGAATAAGT GTTTCTCAAT TTCTGGTGAT ATGGTTTGGC	180
TGTGTCCCA CCCAGAATCT CATCTTGAAT TATATTCCCC ATAATCCCCA CGTGTCACG	240
GCAGGACTCG AG	252

(2) INFORMATION FOR SEQ ID NO:978:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 251 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:978:

GAATTCGGCC TTCATAGCCT AGTTTAGTTC TCAGAATTCT TCATATATTT TGGCAGCAGT	60
TTTTCCATCA GATTATTTTG TAAATATTTT CTCCAGTCT GTGACTTGCT TTTCCATTG	120
TCTTAACAGT GTCTTTCACA CAACAGAAGT TTTTAATTTT AATGAGGCTC AACTTAATTT	180
TTTTTTCATT AGTAGATTGT GCTTTTGTT TTGTATCTAA GAAGCCATCA TTGAACCCAG	240
GATCGCTCGA G	251

(2) INFORMATION FOR SEQ ID NO:979:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 534 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:979:

GAATTCGGCC	TTCATGGCCT	AGAAGGCTTC	TGAATAATTT	CTCAAACTA	NCTTTCCATT	60
TNAGTACACG	ATTTGATAAA	CATAGCACAT	TAGATAGGTA	TTTAGCAATT	TCTTCTACCA	120
ACTACACTTT	GCCCTCACTA	AGGGTTAGAG	TATGATTGTA	AACAATTTCT	ACATATAAAG	180
CATCTTTAAA	TAAGTTTTGT	GTTCACTGAA	CTGAGACTTC	TTTCACTTAT	GTACCTATGG	240
AAGTTAATCT	GAGCATACAC	ATATATACAT	ACTTGCATAC	ATATGTGTAC	ATATGTTTTT	300
TAAGTAAGTN	ACTTTTACCA	TTAGAATAAA	CCTAGACACT	ACAGGGACAA	CTCTGGGGAA	360
CAGGGCGGTC	TGCCTTAACA	ACCCTTCTCT	AGGTTGAGGA	AGGCAGGTAT	AGTTCAGTGA	420
AGGATGTGAT	GAGGCTGTAG	TAAGTCTTCT	CATCATCTGT	TAATCCTGCG	TTGCCTGGTC	480
TCACCACCAC	AGCTACGTGC	ACATCTGCTT	CCTCAGCAGC	ACTGGCCTCT	CGAG	534

(2) INFORMATION FOR SEQ ID NO:980:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 223 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:980:

GCTCGAGTGT	CGTGCTATCT	CTAAATTGTG	ATCACTAAGA	ACCGCTGCGG	AAACAGTAAC	60
TGTTTCTTTT	ATTTTGTACA	TTTGTAGTTG	TAATTTATCC	AATTCTTTCT	TCTTTTGATA	120
AGTCTCCATT	CTCTTTACTT	CACGGGTATT	TTCAAATTCA	TTAATCATTT	TATCACAGTG	180
CCACTTGTTA	GACCCTAATG	AACGATGTCA	CCCTCTTATC	AAA		223

(2) INFORMATION FOR SEQ ID NO:981:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 481 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:981:

GAATTCGGCC	TTCATGGCCT	AATTACTTGA	CCCGTAATAG	GGTTGTGGCC	GTTTTCTGAT	60
GCCTAAGTAT	TATACAGAGC	CCACAATGGC	CAGTTTACTA	CCAGAAAGGG	CTTCAGTAAG	120
ATATTCITGG	ACTTGATACT	TTCTTCAGAT	CCTCTTTGTG	CCAAGATAAT	TTATCCAGTC	180
ATTGGGAATA	GTAAGTTTCT	GTGTAACCCA	TCTCAATTAT	AGAAGCAAGT	TCAGCTTTAT	240
GTATTTGTAT	GGGGAGTTGA	AGATTCAGAT	AGAGGTATTA	AGATGTGTGG	CATTTACTTA	300
AACCATCACA	TTTTTTTCTT	TCTACGCCCC	CTTGCCCTGTA	AAACACCTGG	GAAGTTCCAC	360
TGGTGTGATC	CATCCTGATG	CTTCAGACCA	CCCTCCCTTC	TTACAGAGCC	GTGTCACTTT	420
GCCTGTGGGT	GGGGGCTAGC	CAGCCACCAC	CCTCTTTTCT	GTGCTGCCAG	CCAATCTCGA	480
G						481

(2) INFORMATION FOR SEQ ID NO:982:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 293 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:982:

TCCGTGTCCC	CTCCTCCCTC	TGCCCCCAGT	GTTTCTTCTG	ATTTTTTTTT	CCCCTTTCCC	60
TCCCTCCCTC	TCCGATTCT	TCCCTTGGT	CAGCACAGGT	AAAACGGTTC	CCCTCCCTCC	120
CTGCCTTCAT	GGATCACCAG	CTCACGTCAT	GTTGCCTTCT	CTTTTCTTTG	TGTGTGTGTT	180
TATTTAAGTT	ATTTTCTTC	CTCCTCTCCC	TTTTCTTTT	GGCCCTCCCT	CCCTCCCTCT	240
TCTGCCATGT	AACTGGAGGA	TGTGCTATGA	GTTTGCAAAC	AGCCGGACTC	GAG	293

(2) INFORMATION FOR SEQ ID NO:983:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 334 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:983:

GGTGAGGATG	GTGGCTGTGG	TTGTGTTGGT	GGCTGTGATG	GTGAAGGTGG	CTGTGGTGGG	60
GATGGTGACT	CTGATGCTAA	TGTTGGTTGT	GGTGATGGAG	GCAGCTGTGG	CAAGGATGGT	120
GACTTTGGTG	GAGAAGGTGG	CCATGTTGGG	GCTAGTGGCT	GTGGTTGTGG	TGATGGCCAT	180
GGTGAGGATG	GTGTTAAAGG	TGGCTGTGAT	GAAGATGGTG	ACTGGGGTAG	AAATGGTGAC	240
TGTGATGGTA	ATGTTGGCTG	TGGTGATGAA	GGGTAGTTAT	GGTGAGGATG	ATGACTATGG	300
TGGTGAAGGG	GCCATAGTGG	CAACGGCACT	CGAG			334

(2) INFORMATION FOR SEQ ID NO:984:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 631 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:984:

GAATTCGGCC	TTCATGGCCT	AGGGAAAGAG	TAGGGGTGGA	GGGGTAGGAG	GATTTACTCT	60
TCCAGCGAGA	GCTACGCGCA	TCCCATCCTC	CCCCTCCCCC	CTACCCGGGC	TCCGGCNTGG	120
AGGCGGGGCG	TGGCCGGCCT	GCTTTGGGAG	GGGAGGGGCT	TCCCTTACAG	TGCTGGGCTC	180
TGCCAGGACG	GCTGTGGGGT	CGCCTTACCT	CGGGGTATCC	ACTCTGCAGT	CGACCAGTTC	240
CCGCCAGGAG	CAAAGGGTAG	GAAGGAGAGC	AGGATCTGCT	GTAGGAACGC	AGCTACCGCG	300
CCACTATCAC	GAAGAAACAG	CAGGCTCGGG	GCACGAGACG	AACTGGAGAC	CGCGCTGCCT	360
AGCTGGGTAA	CCTGGGAAGC	AGAGGGTAAT	AAGTGGCGCC	TTAAGATAAC	CCTGTAGCAG	420
CAGCAGTGGC	GGCCAAAGGA	GGCTGCTCAG	GGAACAAGCG	GCTGTAGTAG	TCTGTGGGGC	480
GACTGGAGTG	ACCGAAGCCA	AGGCAGTTTA	GTGCCTCTCG	TGTTCTTATT	TTTAAACCTC	540
TGACTATGCA	ATTCTGAAAC	CTCCCCCAT	CGGGGGACCA	GACAGCCTGA	TAGACACCTT	600
CCACTCTCCT	TCCTCCCGCC	GTGGTCTCGA	G			631

(2) INFORMATION FOR SEQ ID NO:985:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 324 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:985:

GAATTCGGCC	AAAGAGGCCT	ACTGCCTCGG	TTTCTACCTT	TGCCAAATGA	GTTGATAGAT	60
TATCGCTTTT	TTTCCAGCTG	TCATACTCTA	GGAGTCTGAA	TTGTAAAATC	AAAGAAGCAT	120
TTCCCAGAAA	AGTTTTTGTC	AAAAATTGGA	TTACATAAC	CTCAGAAAATG	TGTATTGCTT	180
TAAAAATTAT	AAAGTTCATG	GAGCATACCA	AGCAGCCTGT	ATACCATTTC	TAAACCAACT	240
ACTCCCCTGC	AAGATAGATC	TCTTTTTTAT	AGACAGAAAA	TAAATTCAAA	GAGGTTTGTT	300
ACTTGCCCAA	GGCCACCACT	CGAG				324

(2) INFORMATION FOR SEQ ID NO:986:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 239 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:986:

GAATTCGGCT	TTCATGGCCT	AAAATGTTTT	TCAATTAAAG	ACTTAAATAT	TACACTTTTA	60
AAACTTTTTA	TTATGGAAAT	CTAAAAAATA	TTCACCAAAC	GAGAGAGAAC	ATTACAATGA	120
ACCACCACAT	ACCCATCACC	CATTTTCAAC	AATTATCAAC	ACATGGCCTA	TCTTGTTTCC	180
TCCATACCTT	CAGACACCCT	CCGTCCACAA	ACTGGGTAT	TCTGAAGCAA	GCCTTCGAG	239

(2) INFORMATION FOR SEQ ID NO:987:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 695 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:987:

AAAAGTTCAG	GGACTTTGCA	CCCTGTGGGG	TACTCAGATG	TCCAGCCGCA	CTCTCTACAT	60
TAATAGTAGG	CAACTGGTGT	CCCTGCAGTG	GGGCCACCAG	GAAGTTCCGG	CCAAC TTAA	120
CTTTGCTAGT	GATGTGTNGG	ATCACTGGGC	TGACATGGAG	AAGCTGGCAA	GNGACTCCNA	180
AGCCCACCCC	TGTGGTGGGT	GAATGGGAAA	GGGAAAGAAT	TAATGTGGAA	TTTCAGAGAA	240
CTGAGTGAAA	ACAGCCAGCA	NGCAGCCAAC	TTCTCTCGG	GAGCCTGTGG	CTTGCAGCGT	300
GGGGATCGTG	TGGCAGTGAT	GCTGCCCNGA	ANGCCTGAGT	GGTGGCTGNN	GATCCTGGGC	360
TGCATTGAG	CAGGTCTCAT	CTTTATGCCT	GGAACCATCC	AGATGAAATC	CACAGACATA	420
CTGTATAGGT	TGCAGATGTC	TAAGGCCAAG	GCTATTGTTG	CTGGGGATGA	AGTCATCCAA	480
GAAGTGGACA	CAGTGGCATC	TGAATGTCCT	TCTCTGAGAA	TTAAGCTACT	GGTGTCTGAG	540
AAAAGCTGCG	ATGGGTGGCT	GAAC TTCAAG	AAACTACTAA	ATGAGGCATC	CACCACTCAT	600
CACTGTGTGG	AGACTGGAAG	CCAGGAAGCA	TCTGCCATCT	ACTTCACTAG	TGGGACCAGT	660
GGTCTTCCCA	AGATGGCAGA	ACATTCTTAC	TCGAG			695

(2) INFORMATION FOR SEQ ID NO:988:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 314 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:988:

GAATTCGGCC	TTCATGGCCT	ACTCAGAACA	ATCACTGCAT	ATCCCATCTT	AAAGGCAAAA	60
CCCAAACCAG	AAAAACCCCA	CTCAGGTCTT	GCTGACCCAA	CACTACAGTC	ACTGTATTG	120
AGACCCCTTT	TTCTTGAAAA	AGGGACTTCA	CTTTTTTGAG	CAGCATTCTA	TGGTCTTTT	180
CACACAGCAA	TTGACGCATC	TCACGGCACT	GCTCTCTGCT	GGGCAGAGAG	CAAACACAGA	240
CAGCCACCAT	CCCCATATTC	GTAGTAAGAG	AAACTCCAGA	AACGCAGCCA	CCGTCCCCCT	300
AGACCTGCCT	CGAG					314

(2) INFORMATION FOR SEQ ID NO:989:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 687 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:989:

GAATTCGGCC	AAAGAGGCCT	AGGAGCTCCC	CCATGGATCA	TGGCGTTAAT	GTTTACAGGA	60
CATTACTAT	TCTTAGCATT	ATTGATGTTT	GCTTTCTCTA	CTTTTGAGGA	ATCTGTGAGC	120
AATTATTCCG	AATGGGCAGT	TTTCACAGAT	GATATAGATC	AGTTTAAAC	ACAGAAAGTG	180
CAAGATTTCA	GACCCAACCA	AAAGCTGAAG	AAAAGTATGC	TTCATCCAAG	TTTATATTTT	240
GATGCTGGAG	AAATCCAAGC	AATGAGACAA	AAGTCTCGTG	CAAGCCATT	GCATCTTTTT	300
AGAGCTATCA	GAAGTGCAGT	GACAGTTATG	CTGTCCAACC	CAACATACTA	CCTACCTCCA	360
CCAAAGCATG	CTGATTTTGC	TGCCAAGTGG	AATGAAATTT	ATGGTAACAA	TCTGCCTCCT	420
TTAGCATTGT	ACTGTTTGTT	ATGCCCAGAA	GACAAAGTTG	CCTTTGAATT	TGTCTTGGA	480
TATATGGACA	GGATGGTTGG	CTACAAAGAC	TGGCTAGTAG	AGAATGCACC	AGGAGATGAG	540
GTTCCAATTG	GCCATTCCTT	AACAGGTTTT	GCCACTGCCT	TTGACTTTTT	ATATAACTTA	600
TTAGATAATC	ATCGAAGACA	AAAATACCTG	GAAAAAATAT	GGGTTATTAC	TGAGGAAATG	660
TACGAGTATT	CCATGGTCCG	TCTCGAG				687

(2) INFORMATION FOR SEQ ID NO:990:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 677 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:990:

GAATTCGGCC	AAAGAAGGCC	TAGAGCCCTT	CTGTCCCTTC	TACCATGTGT	GGATGCAGTG	60
AGAAGGCACC	GTATCTCTGA	AGCAGAGAGC	CCGCCCTGGA	CACTGGATCT	GCTGGCACCT	120
TGATCTTGGA	CTTCCAGCC	TCTAGAAGTG	TGAGAAATAA	TTTTTGTTG	TTTACAAATT	180
ACCCAGGCTA	AGGTGTTTCA	TTGTAACCTG	AATGGACCAA	GCTGGTGTGA	CCCTGTTGGA	240
AAACTGGCAG	TATCTACCAA	AAGCCGAACA	TACGTATAAA	CTGATCCAGC	AGTTCCACTC	300
CTGGGTATGT	ACACCACAGA	AAGCTATGTC	CACCGAGACA	TTGGCAAGAA	TGTTTCTAAC	360
CACACGCTGA	CTGTAGCCCC	AAACCTGAAA	CAACCCAAAT	GTCCATCCAC	CAACCCAAAT	420
GTCCATCCAC	AGTTGAAGCT	ACAGTGAAGT	CACAGGTCG	AATACTACTG	CACAGCAACG	480
AATATGAATG	AAAATATCGC	TATGCACAGC	AACATGGATA	AATTTACAG	ACATGAGGTC	540
AAGCAAAAGA	GGTCAGAGTC	CTCATCATCA	AGAGAGAATT	CATTGTATGA	TTCTCTTCCT	600
ACAAAAAGTA	CAGAAATAAG	CAAACTGAT	CCATGGTGTT	AGAAGCCAGG	GGAACAGTTA	660

ACAAGGGAGC ACTCGAG

677

(2) INFORMATION FOR SEQ ID NO:991:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 445 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:991:

GAATTCGGCC	AAAGAGGCCT	AAGAAGCTGC	TTCCTCCTGG	GAACAACCGC	CTCCCGCTCC	60
TAGCAGGTTG	CTACTGCCCC	GAACCCGCGC	TGCAGGGAAC	AGCGGGGCAA	ACAAAACCAA	120
TAGAGCCATG	GCGACTCCCT	CTGCTGCCTT	CGAGGCCCTT	ATGAATGGTG	TGACAAGCTG	180
GGATGTACCC	GAAGATGCTG	TTCCATGTGA	ACTGCTTCTT	ATTGGAGAGG	CTTCATTTC	240
TGTGATGGTG	AATGACATGG	GCCAGGTCCT	CATTGCTGCC	TCCTCCTATG	GCCGTGGCCG	300
CCTGGTGGTC	GTGTCCCATG	AGGACTACTT	GGTGAAGCC	CAGCTCACGC	CCTTTCTCCT	360
GAACGCAGTG	GGGTGGCTTT	GCTCTTCCCC	TGGGGCTCCC	ATTGGTGTAC	ACCCATCCCT	420
GGCACCTTTG	GCCAAAATCC	TCGAG				445

(2) INFORMATION FOR SEQ ID NO:992:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 392 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:992:

GAATTCGGCC	TCATGGCCT	ACTGTGATTT	AAAATCTTGC	TGTGTGGCTT	GGGTTGTTTG	60
TGTTGGTTCC	AAACCCTGAA	TCTTTTGGGG	TCTTCAATT	GTGGGCATGT	CAGTGAAAAT	120
TCTAAGCTTT	GTTTAATGGT	GTGTGTGTGT	CTGTCTGTCT	CTGTGTGAGT	GTGTTTAGAA	180
ATTGGCTTCT	CTGGGTTCCCT	CGCTCGTCTT	CTGGAAGGTG	GGGTTATAGA	CATGCTGGTG	240
AATTCTGAAT	GTTTTATAAA	TTAGACTATT	AACGGAGTTA	AATTGAAGAA	ACCTTCTGTC	300
ATAAGACCTT	CCAGGAATTC	CATTCCAAAT	GAGGAAATGC	ATAAAGACTT	GTCCACTTGG	360
CAAACATTGG	GTGTTTGGGA	GGTGGACTCG	AG			392

(2) INFORMATION FOR SEQ ID NO:993:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 359 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:993:

GAATTCGGCC	TCATGGCCT	AGGCGGCTCC	CTTGGTCCTG	GTGCTGGTGG	TGGCTGTGAC	60
AGTGC GGCG	GCCTTGTTCC	GCTCCAGTCT	GGCCGAGTTC	ATTTCGAGC	GGGTGGAGGT	120
GGTGTCCCA	CTGAGCTCTT	GGAAGAGAGT	GGTTGAAGGC	CTTCACTGT	TGGACTTGGG	180
AGTATCTCCG	TATTCTGGAG	CAGTATTTC	TGAAACTCCA	TTAATAATAT	ACCTCTTTCA	240

TTTCCTAATT GACTATGCTG AATTGGTGTT TATGATAACT GATGCACTCA CTGCTATTGC 300
CCTGTATTTT GCAATCCAGG ACTTCAATAA AGTTGTGTTT AAAAAGCAGA AACCTCGAG 359

(2) INFORMATION FOR SEQ ID NO:994:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 115 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:994:

GAATTCGGCC AAAGAGGCCT AGACTGTCAG CTGTGAGTGG CCAGTACAAC AAATGCTTTG 60
GCTTTCAGTT GTCATTCTGA TGTCTTGCAA CATATCATCG TGTGTTGATTC TCGAG 115

(2) INFORMATION FOR SEQ ID NO:995:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 633 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:995:

GAATTCGGCC AAAGAGGCCT AGTGGAGACA AAAGCATGTG ATCCCAATTT GCTGGGATAT 60
CCTCTCCTGC ATTTCAAACA CCTTCACTCA GTGTCAGCCA CAGCGGCCAC CACATAGCAG 120
CTGGCCCCGC ACCTTCTCTG GAACAGTCTG GAGATGCAAG GTCAGGGTGG AAGGCCTGGT 180
TCACCCCTGA AAGAAAGGAT GGCTAGGGGT AAACAAGACG AGCAACTCCC TGGAAATGCAG 240
GGAGCCAAGA AGGGCAGCCG AGGATAAGGC TCTGCCTCCC CAACGGCGAG GGTTCCTTT 300
CCTTCTGGTC ATTANAATG CACAGCCCCC GGGGAGATGT TGAACATGGC AGGGTCGAAT 360
CGCTGGCCTC GGAAGGGAGA ACTTCAGCAT CCCACCCTTC TTCAGCATCT CATGGACTTT 420
CAGCTCATGG CTCTGTGGCT TGCCCTGCAG CTTCTGGTGG TAGTCAAAGG TAAGCCTGTC 480
CAACACCGCC TGTTCCTCCT CATCCACGGT GGCCATGGAG CGCTCCTTGT TGATCTTGTC 540
AATGTCGATG GGCTCTTCTC CCTCCAGGAT GCGGTTCCAC CAATACTCGC CCACCTTGCT 600
CAGGTTCAAC AAAACGCACT TCCCGGGCTC GAG 633

(2) INFORMATION FOR SEQ ID NO:996:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 462 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:996:

GAATTCGGCC AAAGAGGCCT AGTTGATTCT CAGTTCATGG TGGAGTCATT CAAGTTTATT 60
TCTGGCATCT TGGCAGCCCT GAGTGCCATG ATCTCTCTAG AAATTCGCA AGTCAACATC 120
ATGACAAAAA TGGATCTGCT GAGTAAAAAA GCAAAAAAGG AAATTGAGAA ATTTTATGAT 180
CCAGACATGT ATTCTTTATT AGAAGATTCT ACAAGTGACT TAAGAAGCAA AAAATTCAAG 240
AAACTGACTA AAGCTATATG TGGACTGATT GATGACTACA GCATGGTTCG ATTTTACCT 300

TACGATCAGT	CAGATGAAGA	AAGCATGAAC	ATTGTATTGC	AGCATATTGA	TTTTGCCATT	360
CAATATGGAG	AAGACCTAGA	ATTTAAAGAA	CCAAAGGAAC	GTGAAGATGA	GTCTTCCTCT	420
ATGTTTGACG	AATATTTTCA	AGAATGCCAG	GATGTACTCG	AG		462

(2) INFORMATION FOR SEQ ID NO:997:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 548 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:997:

GAATTCGGCC	AAAGAGGCCT	AGCTGGTAAC	ACATGTGAAC	TCAGGTAAAG	TCATCGAGCA	60
TTTACTGAC	TCTATTCCTC	AATAAAGTAC	TGGGAAAAAA	CTCATAAGAA	TGACAAAAAC	120
AACATACTCA	GGTATGCGAG	CAGAAGCCTC	TGACACAGCT	TGTCTTCGGG	GCTTAACTAA	180
ATGATCTATT	TTAATGAGGG	AATCCGTGGA	AAGGCATGCG	TTTTCAGGCT	CATTTTCTGC	240
TTCGATGCTT	TGTCCAGAGA	GTTGGAATCT	CAACGTGTGT	TTCATGTGAG	GCTCCTTAAG	300
AGGGTGACAT	TCAACATCCC	AAAAGTGGGC	ATAATCCCCC	CTACCTCTGG	GCAAAAATGT	360
GATGGAGACT	TTTGGATCC	CATGGCTTTC	CAGCAGACCA	GAAATAGGAG	AACATCTGAA	420
TGCTGCATAG	GTAGCTCTAA	AAACATCTCC	ACTTTCATCA	ACTCCCTTGA	CATAAGGTGG	480
CACCACAGAC	GTGAAATGGC	ATCTGTCATC	TTTAGCGCCA	CCTTATGTCA	AGGGAGTTGA	540
TTCTCGAG						548

(2) INFORMATION FOR SEQ ID NO:998:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 572 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:998:

GAATTCGGCC	AAAGAGGCCT	AGTTTCCCTT	TCTGTATTTT	ACTACTAAAT	TAGAAAGCAC	60
TGGTTATGTA	ATAAGTTACT	ACATTGCTTT	GGTTGAGTAA	AAACAAGAGT	ATATATTTT	120
CTTGTTTCTT	ATTNCTAAA	CCCTTAACTC	CTGCTGAGGT	CATAACAACC	TCAGTCTAAG	180
CTCTGTGTCC	ATCATACTGT	TAACTTAAAC	AAATGGGTGG	TGGGGGTGGG	AAGGGTAATA	240
CAGTCCTGCC	ATTGCCTACC	AGTAGGAGAG	TCCAAACAGA	ACACTCTTTT	GAGTAGCAAT	300
TATTTAATTT	GCCAGTCAA	GGCACCCTGT	TTATATACTA	TTTCACATG	AATTTGATTA	360
TGCCCTACAG	ACCTGGCTGG	TCAAGGATTT	GATATACACA	TATTGGCTTG	GGATTGAGC	420
TTTCTTTTTT	ATTTAAATAA	AAATTTATAT	ATATATTATA	TATATACATA	TATACATAGC	480
TATATCTGTA	TATATATTGG	GTATGTTTTA	AGGATTTTTT	CGCATGAGCG	CAGCTGTTGC	540
GATAAATTGA	CCGATTGGGA	GGTATTCTCG	AG			572

(2) INFORMATION FOR SEQ ID NO:999:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 629 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:999:

GAATTCGGCC	AAAGAGGCCT	AGAGGGGAGC	ACGTCTTTTC	CTTGAGTGTA	ATTCACTAAT	60
GACTGTGGTT	CCAAGGAGGT	GCGACCTTTA	AAGGGAATTG	GCCCTTCTTT	GAAGGCAGGT	120
GAGAATCTAG	TCTCAGTGAC	AACCCAGCCT	GATTTGGAAG	GGGGGAGTCA	TAAGGGTTTT	180
CGCCAGCAC	ACCAGGGTTG	CAGCCTGCGC	AAGACCTTCC	ATAGCTATTT	CTGCCGGCTT	240
GCTTCCTTCC	CTTCCCAGCC	ACGATGAGGC	AGCTGAGGGT	TGCCACGGAA	ACCGGCTCTG	300
TCCTCCCACT	GGAGGCTGCC	AGCTCTGATT	TCCTGCAGAG	TTAAGAAGGA	GGCGGCAGTG	360
GGGGTCACCC	AGGCGTGAAG	ATGGGTTTCC	CTGGGGATAT	CCTGCCTCCT	GCCCAATCACA	420
GCGTCTCTCT	GGGAATCCTG	GGGGTGCCTG	GAGGCTGAGG	CCCAGGGAAG	CCCCAAACC	480
CCAGTGCTGC	TCTGAGAAGA	GACTAGCCTC	TGGGACATTC	AGAGGTCTGG	GGTTCTTTTA	540
TCTCCCTCCA	GCTAAAGCTA	GAGGGACCTC	ATTATGTGTC	TTACAAGATG	TACCCTAAAC	600
CGTCGATTGA	ATTCTAGACC	CGCCTCGAG				629

(2) INFORMATION FOR SEQ ID NO:1000:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 568 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1000:

GAATTCGGCC	AAAGAGGCCT	ACCTGTATGC	TATTAACACT	CACCACAGCA	GAGAGCTGAG	60
GATTGTGGTT	GCAATTCGGA	ATAAACTGCT	TCTGATCACA	AGAAAACACA	ACAAGCCAAG	120
CGGGGTCACC	AGCACCTCAT	TGTTATCTCC	CCTGTCTGAG	TCACCTGTTG	AAGAATTCCA	180
GTACATCAGG	GAGATCTGTC	TGTCTGACTC	TCCCATGGTG	ANGACCTTAG	TGGATGGGCC	240
AGCTGAAGAG	AGTGACAATC	TCATCTGTGT	GGCTTATCGA	CACCAATTG	ATGTGGTGAA	300
TGAGAGCACA	GGAGAAGCCT	TCAGGCTGCA	CCACGTGGAG	GCCAACAGGG	TTAATTTTGT	360
TGCAGCTATT	GATGTGTACG	AAGATGGAGA	AGCTGGTTTG	CTGTTGTGTT	ACAACACAG	420
TTGCATCTAT	AAAAAGGTTT	GCCCCTTTAA	TGGTGGCTCT	TTTTTGGTTC	AACCTTCTGC	480
GTCAGATTTC	CAGTTCTGTT	GGAACCAAGC	TCCCTATGCA	ATTGTCTGTG	CTTTCCCGTA	540
TCTCCTGGCC	TTCACCACCG	AATCGAG				568

(2) INFORMATION FOR SEQ ID NO:1001:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 543 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1001:

GAATTCGGCC	AAAGAGGCCT	AGTAATACTT	AAAGTGCAAT	TGTTCCAAGG	CTTTTGTTTC	60
CATCATCACA	AATATTATAA	AGAAAGAGCT	ATGTTTAGGG	TGAAGAAGAT	ATGGCACAAG	120
TAATATGTAA	AGAACTTATG	ACTTTCGCAT	CCTCTAGCAA	ACAGTAAGCT	GCCTGTACAG	180
CTGCACACAG	ACGGACTTTA	CACAACAAAC	TCTGGAACCT	CATCATGAGT	GAGATCCAGA	240
GAAAAGTATT	TGCTGGTTCT	TTTGAAGTGA	AAAGCATCTT	GGATGTTGAT	GCACTGCTGG	300
GCCAAGCAAC	TGTTGCAATA	GAGGCCTTCC	TCATCCAGTT	CATGGCCACA	TCCAAGGGTG	360
TAATCTGAG	CAGTGTCTCT	ACACAGACCT	GCAATGCGCA	GGAAGTCTTT	CTGGTAAAGT	420
CTGATGTCAT	CGAGGCTCAA	GCTGTGTCGA	TCAGTGGAGG	TCTTTGGTTT	CCGACATATA	480
GTCTGTGGAA	GAGAATCAGT	ACTCTGGCCA	CGAAGCTTAA	CAACTGTTTC	TGAAGAGCTC	540
GAG						543

(2) INFORMATION FOR SEQ ID NO:1002:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 592 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1002:

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GAATTCGGCC AAAGAGGCCT AATTCCACTT ACGAATTAAC ACTGTGTACA TGGCACCTTF      60
GGGCCCCATCT TGCCTTGAAA GTCCCTGTGT GATGGAACAG TGGCATTTC CTTCCTTTTC      120
TCAGGACTGC AAACAGACCT AATATTTGGC CTTGCCCTTG CCTGGGAAGC TGCTGCTGAG      180
TCTTGCTCTCA GCCGGGCTGT GCATTCCGAG CGGCTGCCCT GCCCTGCGCT CAGCAGCTGG      240
AATCAATCTG CCCACCTCCT TAAGAAGCCA CTTTCATCAGC GGTCAACCGG CAGCTGCTCG      300
CCTCCCAGGG CTGCCGGGCT AGGGCTTTAT CGCATTTTTG AAATTTTCAGA TTTCTGTGTC      360
TGGGCTATGC CCCTCGAACA GTAACAGCAC CGCTTTGCAG CAGGGAGGAG ATTTACCAG      420
GATATGGAGG GGACAGGAGA AAAGCCCTCC TTCCCAGAGT CCACTGTCAT TCAGGATTG      480
CTCTCAAAGA GGCAAGAAAT CTCTAAGAAAT GAAAGGAGGT GTTTTGTGTG TGTGTGTGTT      540
TTTTGTATGT ACTGGGAGGA AATGGCTAAT CTTGGGTATG CACACGCTCG AG              592

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(2) INFORMATION FOR SEQ ID NO:1003:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 584 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1003:

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GAATTCGGCC AAAGAGGCCT AGGCTCCGTC TGTGGGGGG CGAACACGCC GCGGTCCTCG      60
TCGTGTGAAG TAAGAACTCT GCTAGAGAGG AAATGGCTGC TTCATCATCA TCCTCCTCAG      120
CTGGTGGGGT CAGTGGAAGT TCTGTCACTG GATCTGGTTT CAGTGTCTCA GACCTTGCCC      180
CACCACGGAA AGCCCTTTTC ACCTACCCCA AAGGAGCTGG AGAGATGTTA GAAGATGGCT      240
CTGAGAGATC NTCTGCGAAT CTGTTTTTAG CTATCAAGTG GCATCCACGC TTAAACAGGT      300
GAAACATGAT CAGCAAGTTG CTCGGATGGA AAACTAGCT GGTTCGGTAG AAGAGCTGGA      360
GGCTGACGAG TGGCGGTTTA AGCCCATCGA GCAGCTGCTG GGATTCACCC CCTCTTCAGG      420
TTGATACTGC CTGGATGGTC ACCTCTGGTG CGCAGCAAGT GCAAAGCCAG TGGGGGACTT      480
TCTCACAGCT TACATAGCCA TCCAGAGATC CACAGCTACG TCACTGAATT GTTAATGCAC      540
ATTTGTACTT GGTTCCTCTG TATCTATTCA CAGGCGAACT CGAG              584

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(2) INFORMATION FOR SEQ ID NO:1004:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 440 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1004:

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GAATTCGGCC TTCATGGCCT ACTTTCTCAT TCCCTAAGTC ATTAGAAAGC ACCAGTTCTA      60

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ACTCCAAATG	ATGACATGGT	CTTATTTTAT	CTATTAACCA	TAAGCTTACA	GATTCTAGTG	120
AAGAAAAAAC	TTTAGGAGGC	TACATGGTCT	ATTGGAGAGT	GTAGGCTCTG	CAGTCAGAAG	180
ATCCCTACCC	AGGCTTCTGT	CTTTCTCAGT	AAGACTTGGG	ACCACAGCAA	GGTCCGCAAT	240
CTCCTGAGGC	TCTGTTTCT	ATGGTTGGGA	TAACATGGTA	AGTTATTTTC	TTCTAAGTAG	300
TCACACATGG	AAATCTTATC	TAAAATTTTA	TACCATTAAAC	TTTTATTTCA	CTTATTAAC	360
CATACCATTA	ATACTTTACT	TTAGCTATGT	TTGGTATGCA	TGAGTTGATG	AGTGATTAGA	420
GTACTATGAG	CGATCTCGAG					440

(2) INFORMATION FOR SEQ ID NO:1005:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 426 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1005:

GAATTCGGCC	TTCATGGCCT	ACTCAGTTGC	AGATTCTGGC	CAACATGGAC	AGCCAGCTAA	60
AAGAGCTACA	GAGTCAGCAT	ACCCATTGTG	CCCAGGACCT	GGCTATGAAG	GATGAGTTAC	120
TCTGCCAGCT	TACCCAGAGC	AATGAGGAGC	AGGCTGCTCA	ATGGCAAAAG	GAAGAGATGG	180
CACTAAAACA	CATGCAGGCA	GAAGTGCAGC	AGCAACAAGC	TGTCCTGGCC	AAAGAGGTGC	240
GGGACCTGAA	AGAGACCTTG	GAGTTTGCAG	ACCAGGAGAA	TCAGGTTGCT	CACCTGGAGC	300
TGGGTCAGGT	TGAGTGTCAG	TTGAAAACCA	CACTGGAAGT	GCTCCGGGAG	CGCAGCTTGC	360
AGTGTGAGAA	CCTCAAGGAC	ACTGTAGAGA	ACCTAACGGC	TAAACTGGCC	AGCACCATAG	420
CTCGAG						426

(2) INFORMATION FOR SEQ ID NO:1006:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 402 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1006:

GAATTCGGCC	TTCATGGCCT	AGAGTAGCCA	GGGAGCTGGA	AGTTCCACAG	ATTGGTTTTA	60
ATAAACAAAC	TCCCTCAATG	ATGAGTGGTC	TTTGAAGAG	CATGGTTAGA	ACTTGGGATT	120
GTGCTTCTCA	TGACTACAAA	TGTACTTGTA	GCTTAGGTGC	AAAAGGGTAG	GTCAGTGGGT	180
AGCTAACTAC	TGAGGATTGA	TTTCCTGAC	GCTGGTGTTT	AAGTGTCAAC	CAGAACTGGC	240
ATATAAAGTG	GCTCATTAC	CCAAGTATCT	TCCTTTCCTT	TTTACAAAAT	CCTTGGCTGT	300
TGTGGGGCCT	ACATCTCTTC	ATGATTATTA	TTGCATCTGG	TGTCATGTTT	TTCCAGCTGG	360
TGTACTGCTT	CCCTGTAGGC	TTCTTGATGT	TCACTCCTCG	AG		402

(2) INFORMATION FOR SEQ ID NO:1007:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 456 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1007:

GAATTCGGCC	TTCATGGCCT	ACTGGTGCCA	CGGGAGGCAG	ACACCAAGTT	CTGGGGTCTC	60
CAGCTGCAGT	GGGTGGCCGC	CAATTGCTTC	TCTCTGTCCA	GACTAATGAG	AACATGGAGA	120
TCACCACTGC	ACTGCAGTTG	GAATAGCACG	TAAAGAGGGA	GCTGGGAAAG	AAGCTGGGCA	180
AGCTAAAGGA	CATGGTAACC	CTGCCCCATC	CAAGAAGAGC	TGGAAGGCGG	GCACCAGCCT	240
CTGGGGAGGG	GAGGTGTGAA	GCCAGAGGCA	GCTCCAGCCT	GGGGGACAGG	TGACCCAGC	300
ACCCCTCAGG	GCAGTCCTGT	GACTGTTTCT	TGCTTCCCGC	CCTCTGACAT	TTAGTGGTGG	360
GTTTCGTCTT	CCTAGGTCTG	GACATCATCA	TCCCAGCTGG	AGTCATGGAG	CCTCCCAAAC	420
ATAGGGAAAG	AGATGGTGGT	ATAAGAGGCT	CTCGAG			456

(2) INFORMATION FOR SEQ ID NO:1008:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 564 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1008:

GAATTCGGCC	AAAGAGGCCT	AGGATGGCTG	TGTTTGACGG	GTGTTGCTCG	TGACAGTTGG	60
GGTCCTCCTC	AGCATCAGTC	TTGACATGGC	TGCAACTGGG	GGGGTCCTCG	GGATCCTCCC	120
GGAATCTCTT	CCTCAGCATT	CGCTCATGAT	AAGGTTTCAG	GTGTCTTGAT	GGTTCAGTCC	180
TGGAGAAACA	TAAGCATAAC	CTCTACCCCA	AGTTATTATT	TTACCTATTT	CCCAACTTTC	240
TGTTATCAGG	TCTCTCCACC	AAACCAGTTG	TTCTGCTTCT	GTCTTTGCAG	CTGGTTTCTG	300
TAGATGCTGT	TCAGCTGCTG	ATAAGATCCG	GCCTTTAGGC	AGGCTCAAAA	AATTTAAAGT	360
TAATAATGCG	ATTCAATTGC	TTATGGGGTG	TCCTGTAGTA	CCTGTTTTCC	CCCTTTTGCT	420
TCTGCAACTG	CTGTTTCAGG	GAGAGATTCA	TTCTTTCCAC	TATGGCNTGT	CCTTCAGAAAT	480
TATATGGGAT	ATCAGTAATG	TGTTTAATAT	TCCGTATAGA	GAAAAATTTA	GCTAGAGCTT	540
GAGAATTAGG	TTCCAATCCT	CGAG				564

(2) INFORMATION FOR SEQ ID NO:1009:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 661 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1009:

GAATTCGGCC	AAAGAGGCCT	AGAAAAAGAT	GTCATTCCGT	AAAGTAAACA	TCATCATCTT	60
GGTCCTGGCT	GTTGCTCTCT	TCTTACTGGT	TTTGACCCAT	AACTTCCTCA	GCTTGAGCAG	120
TTTGTTAAGG	AATGAGGTTA	CAGATTCAGG	AATTGTAGGG	CCTCAACCTA	TAGACTTTGT	180
CCCAAATGCT	CTCCGACATG	CAGTAGATGG	GAGACAAGAG	GAGATTCCCTG	TGGTCATCGC	240
TGCATCTGAA	GACAGGCTTG	GGGGGGCCAT	TGCAGCTATA	AACAGCATTG	AGCACAACAC	300
TCGCTCCAAT	GTGATTTTCT	ACATTGTTAC	TCTCAACAAT	ACAGCAGACC	ATCTCCGGTC	360
CTGGCTCAAC	AGTGATTCCC	TGAAAAGCAT	CAGATACAAA	ATTGTCAATT	TTGACCCTAA	420
ACTTTTGGAA	GGAAAAGTAA	AGGAGGATCC	TGACCAGGGG	GAATCCATGA	AACCTTTAAC	480
CTTTGCAAGG	TTCTACTTGC	CAATTCTGGT	TCCCAGCGCA	AAGAAGGCCA	TATACATGGA	540
TGATGATGTA	ATTGTGCAAG	GTGATATTCT	TGCCCTTTAC	AATACAGCAC	TGAAGCCAGG	600
ACATGCAGCT	GCATTTTCAG	AAGATTGTGA	TTCAGCCTCT	ACTAAAGTTG	TCGATCTCGA	660
G						661

(2) INFORMATION FOR SEQ ID NO:1010:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 316 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1010:

GAATTCGGCC	TTCATGGCCT	AGGAAAGATT	TGACTGCTTC	TCTCATGCAG	GGGAATAAAG	60
CAAAGGCACG	TGCAGAGGGA	AGTAGGGGTA	GAGAGAGGCA	AGTTAGCTTC	AGAGAGATTT	120
ATTTGCACCC	AGTTCTGTTC	TACTCAGCCT	GACGTTTTAT	CATCTTTTGT	AAAAGTGGCG	180
TGAAGTGGTG	TGGAACACAT	CAGAGGGTGA	AGCCGAGCAA	ATCTGAAAGA	GAGCAGAGGA	240
TTTCATATGA	TATCCTATGT	GTGCTTTCCC	CTTCCTTCTT	AGGAGCTGGA	AGAGGCAGAA	300
TTGATGTCCA	CTCGAG					316

(2) INFORMATION FOR SEQ ID NO:1011:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 244 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1011:

GAATTCGGCC	TTCATGGCCT	AGAAACATGC	TAGACATTTT	GAAGAACCAG	CAAGAATGTT	60
AGTGTAGCCA	ACAGTGAGGC	AGGCAAAGGT	GAGTAAGGTA	GATTAGTTCA	GGGAAGAAAA	120
CATAACATTA	TTTAATCCAT	TGTGGGCCAC	ATTGCACTAT	GATAACACTA	TCATGTCATA	180
GAGTCTCACC	ATTGTTTAAG	ATGTTTAAAT	TTTTTAATAC	GAATATATTC	TCACACCCCT	240
CGAG						244

(2) INFORMATION FOR SEQ ID NO:1012:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 355 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1012:

GAATTCGGCC	TTCATGGCCT	AGCACTTCCC	GAGACTCTCT	AGCCTTGGAT	AAAGAGAGAA	60
TGGATAAAGA	TCTGGGATCT	GTGCAGGGAT	TTGAAGATAC	AAATAAATCC	GAGAGAAGCT	120
AGAGTCTGGA	AGGAGATGAC	GAGTCCAAGT	TAGATGATGC	ACATTCATTA	GGCTCTGGTG	180
CTGGAGAAGG	ATACGAGCCA	ATCAGTGATG	ACGAAGTAGA	TGAAATTCTG	GCAGGTGATG	240
CAGAAAAGAG	GGAGGACCAA	CAGGATGAGG	AGAAGATGCC	AGATCCCTTA	GATGTGATAG	300
ATGTGGATTG	GTCTGGTCTT	ATGCCAAAGC	ATCCAAAAGA	ACAACGAGGC	TCGAG	355

(2) INFORMATION FOR SEQ ID NO:1013:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 351 base pairs
- (B) TYPE: nucleic acid

(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1013:

GAATTCGGCC	TTCATGGCCT	ACAGCCTAAA	TGTTTTATTT	CCTGAGAGGC	TGGAATCTGT	60
ATTTGTGGTA	TCAATCAGTC	AACTGAAATT	TATTAAATGC	CTGCTGTGAG	CAAGGCCTAA	120
TGCTGAGGGA	TGTAAAGAAG	AGTGAGAAGC	TAGTCTGGTT	GGGGTNATAT	GACATGGCAA	180
GTCATAGAAT	GAAGAAGCGT	ATTCCTTGTC	ATATGAAAGC	TGCAGATTAG	TGTGGTTCTA	240
AGTAGAGGCC	AGGGTCACTG	GAGTCTAGGA	TTGCAGGGTT	GGCTGGCTTC	CCAGAGGCTA	300
AGAATTTAAT	TTGGATCTTG	AAGATCTGGT	CCAATTCCAA	CANGACTCGA	G	351

(2) INFORMATION FOR SEQ ID NO:1014:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 393 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1014:

GAATTCGGCC	TTCATGGCCT	AGGCCTTGTA	TTTTTTCTTA	TTTTCTGCTA	AATTAGAAAG	60
AAATTTGCTG	TTTCAAATAT	ACTCAAGCTG	TTCAGTTCTT	CAACAAAAAG	TAGGTGACTG	120
AAACTGTAT	GTTTAACTAT	GCTTAAGTTA	ATATTTATAG	TAATGATAGA	AGCCATTTTA	180
TTGGCAATAT	ATCACTTCCT	GATTTCCACA	CCAGGCATTC	CCACATGCAC	AAACAGGTGT	240
GTGGGAGGAA	GGGAAATGGG	CAAAAATGAT	TTCTTCAAG	AGGCTACTGA	GAATGAAAAC	300
TCAAATCTG	CACAAATAGG	GGTGGTGGAA	GGAGAGAAAG	AAAACCCAT	GCCAGAAATA	360
ACATGCTTAG	CAGAGAGAGA	GAGAGATCTC	GAG			393

(2) INFORMATION FOR SEQ ID NO:1015:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 262 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1015:

GAATTCGGCC	TTCATGGCCT	AACTCAGTTG	GCTTCTAATT	TGCGTAACAA	GATTAAGGTA	60
GTATTTTGT	ACTATTATTG	GAAGCATGCC	TTCCCTTTTT	CACATTATTA	AATTGTATTT	120
ATATTTGTGC	AATTTTAAAC	TATGTTTCA	AATAAACTTT	GTCTGCGGCT	TCGAGGTCTT	180
TTCAGGAATC	TTTCAAATG	GGATTGGGG	ATCAGAACTC	CTTCTGATCA	AATGGAATCC	240
AATTTGTACT	ACTGGTCTCG	AG				262

(2) INFORMATION FOR SEQ ID NO:1016:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 304 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1016:

CAGAATGGGA	CTCCAAGCCT	GNCTCCTAGG	GCTCTTTGCC	CTCATCCTCT	CTGGCAAATG	60
CAGTTACAGC	CCGGAGCCCG	ACCAGCGGAG	GACGCTGCCC	CCAGGCTGGG	TGTCCCTGGG	120
CCGTGCGGAC	CCTGAGGAAG	AGCTGAGTCT	CACCTTTGCC	CTGAGACAGC	AGAATGTGGA	180
AAGACTCTCG	GAGCTGGTGC	AGGCTGTGTC	GGATCCCAGC	TCTCCTCAAT	ACGGAAAATA	240
CCTGACCCTA	GAGAATGTGG	CTGATCTGGT	GAGGCCATCC	CCACTGACCC	TCCACACGCT	300
CGAG						304

(2) INFORMATION FOR SEQ ID NO:1017:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 355 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1017:

GAATTCGGCC	AAAGAGGCCT	AGTTTAAAGA	AAAAAAAAAA	GACCCATCAA	GGGCATAGAA	60
AAGCTTAGGT	GAAGAAACCC	TAAATGAAT	CCTCATTTAT	CAACTCATTC	ATTTATTGAT	120
TCATTGTTC	ATTCATTGT	TCACTCAAGA	AGTATTTGTT	GCCAGACACA	GTACCAACAA	180
AGAAAAAAG	CATCCACTAC	GGCTTTGCAG	AGCTTGGTAC	GCAATGCCTG	GTTGAGAGGA	240
GATATTGTG	CATCGCTTGC	TTTAACTGT	ATCACAGCCT	AGGGTGGCAT	GCAGAGGTTT	300
GAATAAGTGC	TGAAACAGGA	CAAGTGAGGT	GCTTATGGAA	ACACACAGGC	TCGAG	355

(2) INFORMATION FOR SEQ ID NO:1018:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 502 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1018:

GAATTCGGCC	AAAGAGGCCT	AGAAGGAAAT	TGTCCCGAAT	CCCTGCAGTC	TTTCTGTAGG	60
TTGCGGCACA	ACGCCAGGCA	AAAGAAGAGG	AAGGAATTTA	ATCCTAATCG	GTGGAGGTCC	120
ATTTGAGGGT	CTGCTGTAGC	AGGTGGCTCC	GCTTGAAGCG	AGGGAGGAAG	TTTCTCCGA	180
TCAGTAGAGA	TTGGAAAGAT	TGTTGGGAGT	GGCACACCAC	TAGGGAAAAG	AAGAAGGGGC	240
GAAGTGTCTG	TCTTGAGGAG	GTCAACCCCC	AGAATCAGCT	CTTGTGGCCT	TGAAGTGGCT	300
GAAGACGATC	ACCCTCCACA	GGCTTGAGCC	CAGTCCCACA	GCCTTCCTCC	CCCAGCCTGA	360
GTGACTACTC	TATTCCTTGG	TCCCTGCTAT	TGTCGGGGAC	GATTGCATGG	GCTACGCCAG	420
GAAAGTAGGC	TGGGTGACCG	CAGGCCTGGT	GATTGGGGCT	GGCGCCTGCT	ATTGCATTTA	480
TAGACTGACT	AGGGGGCTCG	AG				502

(2) INFORMATION FOR SEQ ID NO:1019:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 465 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1019:

GAATTCGGCC AAAGAGGCCT AATCAAATAG TAAAGGCTGT TCTGGCTTTT TATCTTCTTA	60
GCTCATCTTA AATAAGTAGT ACACTTGGAT GCAGTGCCTC TGAAGTGCTA ATCAGTTGTA	120
ACAATAGCAC AAATCGAACT TAGGATTGTG TTCTTCTCTT CTGTGTTTCG ATTTTGTGATC	180
AATTCTTTAA TTTTGAAGC CTATAATACA GTTTTCTATT CTTGGAGATA AAAATTAAAT	240
GGATCACTGA TATTTAGTC ATTCTGCTTC TCATCTAAAT ATTTCCATAT TCTGTATTAG	300
GAGAAAATTA CCCTCCAGC ACCAGCCCCC CTCTCAAACC CCCAACCCAA AACCAGCAT	360
TTTGGGAATGA GTCTCCTTTA GTTTCAGAGT GTGGATTGTA TAACCCATAT ACTCTTCGAT	420
GTACTTGTTT GGTTCGTAT TAATTTGACT GTGCACGATC TCGAG	465

(2) INFORMATION FOR SEQ ID NO:1020:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 243 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1020:

GAATTCGGCC TTCATGGCCT AGGATTTCGT ATGCAAGCTC TTGTTTCTCA GGCTGCCTGC	60
AGAAGAAGTC GCTATAAATT ATCTGTTGTC TACATGGTAC AAGGCCCAT T GACTCATCTG	120
ATGCTTGTTT TGTTAATTT TTTAATATTT TTATCACGGG GCAGTGGGAG GGCTTGGCT	180
TTTAGCCACA GCTGTTTAA GACTTCTGAT CTCCTGCCCT GCAGGAATAG GTGGCAACTC	240
GAG	243

(2) INFORMATION FOR SEQ ID NO:1021:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 442 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1021:

CTCCACCGAG AGCCTGGACA GTATGAAGGC TCTGACAGCC GCCATCGAAG CTGCAAACGC	60
CCAGATCCAT GGCCCTGCCA GTCAACACAT GGGCAATAAC ACTGCCACCG TCACCACCAC	120
GACTACCATA GCCACCGTCA CCACGGAGGA CAGGAAGAAG GACCACTTTA AGAAAAATCG	180
ATGCCTGTCT ATCGGGATAC AGGTGGATGA TGCTGAAGAA CCTGACAAAA CAGGGGAGAA	240
TAAAGCACCC AGTAAGTTCC AGTCCGTGGG AGTGCAAGTA GAAGAAGAGA AGTGCTTCCG	300
CAGGTTCACT CGATCCAACA GTGTGACGAC AGCAGTACAG GCCGACCTGG ACTTCCATGA	360
TAATCTGGAA AATTCTCTGG AATCTATAGA GGACAATTCTG TGTCTGGCC CCATGGCCAG	420
ACAGTTCTCC CGCGATCTCG AG	442

(2) INFORMATION FOR SEQ ID NO:1022:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 274 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1022:

GAATTCGGCC	TTCATGGCCT	AGATGATCAG	GTTTTCTGG	ATGGAAATGA	GGTGTATGTA	60
TGGATCTATG	ACCCAGTTCA	CTTTAAAACA	TTGTGCATGG	GATTAATTCT	TGTGATTGCA	120
GTAATAGCGG	CCACCCTCTT	CCCCCTTTGG	CCAGCAGAAA	TGAGAGTAGG	TGTTTATTAC	180
CTCAGTGTGG	GTGCAGGCTG	TTTGTAGCC	AGTATTCTTC	TCCTTGCTGT	TGTCGATGC	240
ATTCTATTTC	TCATCATTTG	GCTCATAACT	CGAG			274

(2) INFORMATION FOR SEQ ID NO:1023:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 196 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1023:

GAATTCGGCC	TTCATGGCCT	ACTTTCCAG	AAACCAAGAG	TGGCTCTACT	GTGGCTATAT	60
TATTATTGTT	ATTATTATTA	TTTGGAGAT	GGGGTCTCAC	TTTGTATCC	AGGCTGGAGA	120
GCAATGGCAC	CATCATAGCT	CACTACAGCC	CCAACTGCT	GTGCTCAAGG	GATCCTCCTG	180
TCTCAGCCTT	CTCGAG					196

(2) INFORMATION FOR SEQ ID NO:1024:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 395 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1024:

GAATTCGGCC	TTCATGGCCT	AATCATTTAT	ATAAAGTTTA	AAAACATTTC	AGAACTGAAC	60
TATATATTTT	TAGAAATATC	TGCATATGCC	ACATAAATTT	TAAAATCAT	AAGAATGCTA	120
AACAGCACAT	TCAGGACAGG	GTGAAGAAAC	AGGCATGCAG	GTTGTGCAGT	AGGAAGCTGG	180
GTAACATTGT	TCCTTATGGC	TTTGTTGTCG	CTTCCAGAAT	TTCATTAAAA	ACTTTTTAAA	240
AAACATGGGC	CCACATTATG	AATTACGTCT	GCTTTTAGAG	TACTAAAAAC	TCCAAGCAAA	300
AACACATGAG	CCACCGGGCA	CGCCTGGCCT	TTATTTTATT	TTTCTACGTT	ATTATTCCTG	360
TTTCAGAGG	AGGGAATTGT	CAGGGAATC	TCGAG			395

(2) INFORMATION FOR SEQ ID NO:1025:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 429 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1025:

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GGAGAGCTCT GGGCCAGCCC TTCTCTCTCT CTCTCTCTCT CTCTCTCTCT CTCTCTCTCT 60
CTCTCTCTCT CTCTCTCTCT CTCTCTCTCT CTCTGTGTGT GTATATATAT ATATATANAC 120
TTTTCCCTTC TGGATGCAAT AGAGCTATTT TTTTCTCTTT GGAATTGAGT GACACCACCA 180
AGATACGTTT TTGGGTGAA TATGTGTGTT TTTCAAAATT CAGTCTGGCC TTTTGTGTTG 240
TGTTGTGTTG TGTTTCTTT AGATGGAGTT TCACTCTTGT TGCCCACTCT GGAGTGCAAT 300
GGCACTATCT CTACTCACTG CTACCTCCGC CTCCAGGTT CAAGCAATTC TCCTGCCTCA 360
GCCTCCCAAG TAGCTGGGAT TATAGGCATG TGCCACCATG CCCAGGCAGT TTTTGTATTT 420
AGTCTCGAG 429

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(2) INFORMATION FOR SEQ ID NO:1026:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 407 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1026:

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GAATTCGGCC TTCATGGCCT AGAGAACTGG AGCCAGCTGT CAACTGCCCC CGCCCCACCC 60
AGGCCATTTG GCTTCTGCTA CCGGCATGCT GCTCAGGGCT CTGCCCCAAGG ACAACGACGA 120
GCCCCCTGTG TCCTCTCCTG GGTCACTTTC CATGACCCTG AGGCAGCGAA GACAAGCTCG 180
GCAGCTCCCT GAGCTGCTTC ACACCAACTA CCTATGAGTC TGAGGCCAGC ATCCAGGCGC 240
TGCCCAAGCC CTGAGAGTCC CTGGACCATG ACGTAGCCTG TGTGTGAAGG GAGCAAGACA 300
GCCTTGACAG AAGCACAGAG AACGCCACTG GGATTCTTAA AGACGCGAAG GGAAAAAGCA 360
CAGAAGATGC TGGCGCTGCA TCTCCTCCAG CACCGAGAGG CCTCGAG 407

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(2) INFORMATION FOR SEQ ID NO:1027:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 402 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1027:

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GAATTCGGCC TTCATGGCCT AAATTAATAT CCTTATTTT GCAGATTAGG AAATAAGAC 60
GTAAGGAGGC TGGGTGCCTG GTTCAAGATC ATATAGCTAA CATTATTGGA CATGCAAATC 120
AAGCCCAGAT TTGTGACTCT GAGCTGATGT TAATTCTGTC ACAATATTGG TTCTCAAGAT 180
AAATCTTTCC AGGTGAGGGG GAAAGGGAAT AAATATCTAG AAGTCCCCIT AAACAGAAGT 240
AATTAATTCG TTTGCAGAAA TTGGCAAAAT TTGGGGTTCC CTTCTTAAAA GTTTCCTTCT 300
GTCACCTGGA AAAAATTTAA AATATGTGCA TTAGGTTGAC AAAGATCAAA AAAGTTAAAA 360
AAAAACCTT TTTGGAATGC TGTGGAGAAA GTAGCACTCG AG 402

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(2) INFORMATION FOR SEQ ID NO:1028:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 320 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1028:

GAATTCGGCC TTCATGGCCT AAGGGGCTGA AATTAAGAAT GTGGCTTTTT TATCCTTTCA	60
AAAATAGATT ATTTGGCTGG ATGTGGTGGC TCACGCCTGT AATCCTAGCA TTTTGGGAGG	120
CTGAGGCAGG CAGATCACCT GAGGTAAGGA GTTCAAGACA AGCATGTCCT GGTGAAACCC	180
CATCTCTACT AAAAATACAA AAAATTAGCC AGGTGTGGTG GCAGGTTTCT GTAGTCCCAG	240
CTACATGGGA GGCTGAGGCA GGAGACTCAC TTGAACCCGG AGTGTCTCGA GGCAGGTCTA	300
GAATTCAATT AGGCCATGAA	320

(2) INFORMATION FOR SEQ ID NO:1029:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 252 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1029:

GCAGATTTTC GCTCTCATCC CATATCTATT GAGAATGCTG TAGTTGAGGG TTGTTAGAAA	60
CCTGCATTTT ATTAAAATCC CTCCAGGTGA TTCTGATGCA GGCTAGTTCA GTAAACAATA	120
TCAACTAGTT TTCATAAAGA AAACCTCTGG AGGGCCCATATA GTGCCTGCAC TCCAGGTCTC	180
AAAGTATACT TTGAGATCTA GGTATCTGC CAAGGTGCTA TCCTGAAAGG ACTCTAAATG	240
AGACAACCTCG AG	252

(2) INFORMATION FOR SEQ ID NO:1030:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 280 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1030:

GAATTCGGCC TTCATGGCCT ACCTTATGGC CTAATTAAAT ATTAGTAATA GGTATTTCGAT	60
TTGTTTTTAA ATGATTTCTT GTAATAGACT ATTGGGTCAG CTAATACTTT TTTGCATCTT	120
CATATTTTAT GTCATGTTAA TGATAAATTT TCTGACTTTG ATTTGTATGT TTTTGGCCCTT	180
TATCCTCTTA GGTGGCCTTG GGGGACTTGC AGGTCTGAGT AGCTTGGGTT TGAATACTAC	240
CAACTTCTCT GAACTACAGA GTCAGATGCA GCATCTCGAG	280

(2) INFORMATION FOR SEQ ID NO:1031:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 291 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1031:

GAATTCGGCC TTCATGGCCT AGAGCAAGTG GTTTTAAAT ATCTTCGAGC TGAACCTGAG	60
GACCATTATT TTTTAATGAC AGAACCTCCA CTCATACAC CAGAAACAG AGAGTATCTT	120
GCAGAAATTA TGTTTGAATC ATTTAACGTA CCAGGACTCT ACATTGCAGT TCAGGCAGTG	180

CTGGCCTTGG CGGCATCTTG GACATCTCGA CAAGTGGGTG AACGTACGTT AACGGGGATA 240
 GTCATTGACA GCGGAGATGG AGTCACCCAT GTTATCCCAG TGGCTCTCGA G 291

(2) INFORMATION FOR SEQ ID NO:1032:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 277 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1032:

TAAATAATT TAACTTTTTT ATTACATTAA AAAACAGGAC TCTGGGAATT GTCACCTTTAT 60
 GATCAGCCTT ATATTTTTTC CAGACTGTGT CATTGTGTAT GCCTGTGCCA CCCAACGGAT 120
 GAGACCACTG ATCATGTTTA GCTCAAATTT ATGTGGATA GAGTTATAG GATGGTCCTT 180
 ATCTGAATGC AGAAAGGAAT GTTTATTTTG CTGTTATGTT TTATATGGGA TAATACTTTA 240
 TAATTGTGTG ACTATCCTAT TCCCAACAA ACTCGAG 277

(2) INFORMATION FOR SEQ ID NO:1033:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 298 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1033:

GAATTCGGCC TTCATGGCCT AGGTTACATG TATAAATAAA TCGTAGCTGT TAATCAAACCT 60
 GATCATTGTC TATTTGTTGT TTCACATGTT TTCATTTATT TGTTCAATCA GCAAACACTT 120
 AGTTGTGTGC CAGGAATTAA AATCCAGTGT TGTTCTTTTC TTATTTTTTT TTTGGCTAGT 180
 GGAATATGAA AACCACTGTG ACTTTGTAAA GCTGCGGGAA ATGCTCATT GTACAAATAT 240
 GGAGGACCTG CGAGAGCAGA CCCATACCAG GCACTATGAG CTTTACAGGC ATCTCGAG 298

(2) INFORMATION FOR SEQ ID NO:1034:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 339 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1034:

GAATTCGGA AGACACTGAC TGA CTGGAAG ACCTGGATT CTTTCTGGAA GACACTGATT 60
 GACTGGAAGA CCTGGATTTC TTTCTGGAAG AACTGATTG ACTGGAAGAT CTAGATTTTT 120
 CTGGAAGAAC TAGATTACT GGAAGACTTG GATTGGTGG AAGACGTAGA TTTTCTGGA 180
 AGACACTGAC TGA CTGGAAG ACCTGGATT CTTTCTGGAA GACACTGATT GACTGGAAGA 240
 CCTGGATTTC TTTCTGGAAG AACTGATTG ACTGGAAGAT CTAGATTTTT CTGGAAGAAC 300
 TAGATTACT GGAAGACTTG GTAGGCCATG AAGTCCGAG 339

(2) INFORMATION FOR SEQ ID NO:1035:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 263 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1035:

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GAATTCGGCC AAAGAGGCCT AGCACTGTAA AGATGAAGCT GGCTAACTGG TACTGGCTGA      60
GCTCAGCTGT TCTTGCCACT TACGGTTTTT TGGTTGTGGC AAACAATGAA ACAGAGGAAA      120
TTAAAGATGA AAGAGCAAAG GATGTCTGCC CAGTGAGACT AGAAAGCAGA GGGAAATGCG      180
AAGAGGCAGG GGAGTGCCCC TACCAGGTAA GCCTGCCCCC CTTGACTATT CAGCTCCCGA      240
AGCAATTCAG CAGAGATCTC GAG                                     263

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(2) INFORMATION FOR SEQ ID NO:1036:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 262 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1036:

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GAATTCGGCC AAAGAGGCCT AAAGCACCCG CTTCTCACC ACCCCACTG TTGGGCCTAT      60
AGTAGCAGGT TAGTGAGTAC CTAGGGCGGC TCAACTCCTC CCACAGCACC AACCCAGCAT      120
GGTCCCCTG AAGTCCTACT ACGCCCTCCC CTCCCAGCC TTTTCCAGAA ACCATACTGG      180
GCTCAGATCA GAGCTCCGAA GCGGTCAAAG TGAGCTGAGC AGGACAGGCC CAGCCTTTCT      240
CCACTGCCAC GTCACCCTCG AG                                     262

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(2) INFORMATION FOR SEQ ID NO:1037:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 285 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1037:

```

GAATTCGGCC AAAGAGGCCT ACGGAGCTGT CAGCCAGGGG AGTGGGGTCA GCCGTCAGCC      60
AGCCCTCCCG TTTCCGCCCC GTGGGCCCTG ACCCACTCC CTTTCTAGA AGTCAATCCT      120
AAGGTTTCTC TGCTCTGGCT AAGAGGATGT AAATTGGAT TCTTAGAGGG CATGGCACCC      180
CCAGTCCCTG CCCAGATAAA GTAGCACAGT GGCATGCAGC ACCTCTGTCT GTTGCTGACG      240
TTGGGGGGCT TACACACCCA CCTCATCTCC GTGCACAGAC TCGAG                                     285

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(2) INFORMATION FOR SEQ ID NO:1038:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 291 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1038:

GAATTCGGCC	TTCATGGCCT	AGCTCTGCAA	GGAAGAGAGC	TTCACGTCTC	TGGTCAGCCA	60
AGCGAGGCTG	TCTCTCCAGC	TCTCAGAGAG	CTCTCGGGGC	TCTCCTGCAG	GAGACCAGGC	120
CAATGCTCCT	GTGCTTCCTG	GGGCCAGTAG	CAGCACCCTG	AGCTCCCTGC	CACCAGGCAG	180
CTGAAAGGCA	TAGCGTGAGG	TGCTTCTCTC	AGTCCCAATT	ATGACAGTGG	CCACCGGAGA	240
CCCAGCAGAC	GAGGCTGCTG	CCCTCCCTGG	GCACCCACAG	GACGCCTCGA	G	291

(2) INFORMATION FOR SEQ ID NO:1039:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 393 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1039:

GAATTCGGCC	TTCATGGCCT	AACTCTACAG	CAGTGCTTAT	TTTTACATTT	CCAAGCGAAT	60
ACCAAAACCT	TCAGCAAAGA	TTGGGTTGGT	ATTAACGGGT	TTTTGTCTCA	GAAGTGTATT	120
GTGGATCCCG	GAGTTTCCCG	CAAATCCATC	TACATCAAAT	TTGTAGAAGT	AGAGAGGGAT	180
TTTCTTTCCG	CAGGCTCTTT	AGTTGAGTGC	CTGGAAAAAG	CCATTGGATA	CCCCTTAAAA	240
TTTAACAAC	GAATGTCATC	CTTCATAAGG	ATTTGGGCTC	TTAGCTCCTT	CTTCTCTACT	300
CACTTCCCAT	TACCCGGACC	ACCCCTCATC	CAGATGCCGC	CGTCAGACTC	TTCATGGAAA	360
CCCTTTCTTC	AATTGGGCCA	GTACGATCTC	GAG			393

(2) INFORMATION FOR SEQ ID NO:1040:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 603 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1040:

GAATTCGGCC	AAAGAGGCCT	ACCCTACTGT	GACACACCTA	CCATGCGGAC	ACTCTTCAAC	60
CTCCTCTGGC	TTGCCCTGGC	CTGCAGCCCT	GTTCACTACTA	CCCTGTCAAA	GTCAGATGCC	120
AAAAAAGCCG	CCTCAAAGAC	GCTGCTGGAG	AAGAGTCAGT	TTTCAGATAA	GCCGGTGCAA	180
GACCGGGGTT	TGGTGGTGAC	GGACCTCAAA	GCTGAGAGTG	TGGTTCTTGA	GCATCGCAGC	240
TACTGCTCGG	CAAAGGCCCG	GGACAGACAC	TTTGCTGGGG	ATGTACTGGG	CTATGTCACT	300
CCATGGAACA	GCCATGGCTA	CGATGTCACC	AAGGTCTTTG	GGAGCAAGTT	CACACAGATC	360
TCACCCGTCT	GGCTGCAGCT	GAAGAGACGT	GGCCGTGAGA	TGTTTGAGGT	CACGGGCTC	420
CACGACGTGG	ACCAAGGGTG	GATGCGAGCT	GTCAGGAAGC	ATGCCAAGGG	CCTGCACATA	480
GTGCCTCGGC	TCCTGTTTGA	GGACTGGACT	TACGATGATT	TCCGGAACGT	CTTAGACAGT	540
GAGGATGAGA	TAGAGGAGCT	GAGCAAGACC	GTGGTCCAGG	TGGCAAAGAA	CCAGCATCTC	600
GAG						603

(2) INFORMATION FOR SEQ ID NO:1041:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 292 base pairs
- (B) TYPE: nucleic acid

- (C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1041:

GAATTCGGCC	TTCATGGCCT	ATAGAAACAT	CAGTGGGCAC	ATTTACAACC	AGAATGTATC	60
CCAGAAGGAC	TGCAACTGCC	TGCACGTGGT	GGAGCCCATG	CCAGTGCCTG	GCCATGACGT	120
GGAGGCCTAC	TGCCTGCTGT	GCGAGTGCAG	GTACGAGGAG	CGCAGCACCA	CCACCATCAA	180
GGTCATCATT	GTCTCTACC	TGTCCGTGGT	GGGTGCCCTG	TTGCTCTACA	TGGCCTTCCT	240
GATGCTGGTG	GACCCTCTGA	TCCGAAAGCC	GGATGCACAC	ACTGAGCTCG	AG	292

(2) INFORMATION FOR SEQ ID NO:1042:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 331 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1042:

GAAGAAAAGC	AGAAAGAACT	GGCAGAAACA	GAACCCAAAT	TCAACAGTGT	GAAAGAGAAA	60
GAAGAACGAG	GAATTGCTAG	ATTGGCTCAA	GCTACCCAGG	AAAGAACGGA	TCTTTATGCA	120
AAGCAGGGTC	GAGGAAGCCA	GTTTACATCA	AAAGAAGAAA	GGGATAAGTG	GATTAAAAAG	180
GAACTCAAGT	CTTTAGATCA	GGCTATTAAT	GACAAGAAAA	GACAGATTGC	TGCTATACAT	240
AAGGATTTGG	AAGACACTGA	AGCAAATAAA	GAGAAAAATC	TGGAGCAGTA	TAATAAAGTG	300
GACCAGGATC	TTAATGAAGT	CAAAGCTCGA	G			331

(2) INFORMATION FOR SEQ ID NO:1043:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 268 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1043:

GATGGCCACT	TCCCAGGCTG	ACATAGAGAC	CGACCCAGGT	ATCTCTGAAC	CTGACGGTGC	60
AACTGCACAG	ACATCAGCAG	ATGGTTCCCA	GGCTCAGAAT	CTGGAGTCCC	GGACAATAAT	120
TCGGGGCAAG	AGGACCCGCA	AGATTAATAA	CTTGAATGTT	GAAGAGAACA	GCAGTGGGGA	180
TCAGAGGCGG	GCCCCACTGG	CTGCAGGGAC	CTGGAGGTCT	GCACCAAGTC	CAGTGACCAC	240
TCAGAACCCA	CCTGACGCAC	CCCTCGAG				268

(2) INFORMATION FOR SEQ ID NO:1044:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 391 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1044:

GTCATTGCAT	CCAAGATAAT	GAAATATCTA	TAACCCCAAA	AGTTTCCTGT	GTCCCTTGT	60
TATTCATTGC	CCTGCCCAGT	ATTCAGGCAA	CACGGATCTG	TTTTCTGTTT	TAGGTAGTT	120
TGCATTTTCT	ATAAAGTCTT	ATGAATGAAA	TAATAAAATG	TGGACTATTT	TCATGGGCCG	180
GGGAGCAGTG	TGGCTTCTTT	CATTCAAAT	GATTGTTTTG	AAATTCATCC	ACAGCGTTGC	240
ACGTATCAGT	AGTAGATTCC	ATTGATTGT	TGATTGTAT	TCTATTGTAT	GCCTGAGTCA	300
AAATTTATTC	ATCTCTTGT	CTGTTGATAG	CCATTGGGT	TCTCCAGTT	TGGGGCCATT	360
ACAAATAGAG	GTAATATGAA	CTTTCTCGA	G			391

(2) INFORMATION FOR SEQ ID NO:1045:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 288 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1045:

GAATTCGGCC	TTCATGGCCT	AATGTGAGCC	ACCGCACCCA	GCCGAATATT	TGTAATTTGT	60
ATAAATTCAT	TGCTGTTTT	ACAGTTTGAA	TGGCTCTTTT	ACCCTGGCAT	AATTTGTAA	120
CGTGTGGAGC	ATTTGGAAAA	TTTTATTGG	ATTATGCAGA	TATTTTCAAT	GCTGGTATTT	180
CATTATATGA	TAGTAAAAAA	TCACTTTTGG	TTTGTGTTTG	TTTTGTTTAT	TTTCTTTTTT	240
TTTTTGAGGC	AGAGTTTCGT	GCTTGTGCGC	CAGCCGAAGG	CGCTCGAG		288

(2) INFORMATION FOR SEQ ID NO:1046:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 279 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1046:

GAATTCGGCC	TTCATGGCCT	AGTAACTTCA	TAACATTGCT	GGTGTGAGG	TGAATCTTAG	60
TGGTCATCCA	GTCCCAAGGC	ATCCTTGCCA	GCCCCCTACA	ATACCTGGAT	GGGCGCTTAT	120
CTTCAGGTAG	GCCTGAGCCT	TTCTGGTAAA	GAGGAGCTCA	CTATTTCTAA	AGGAAACCTG	180
TGCCATTGGG	TTAAAAAAGT	ATTAATTTT	AAACATTGGT	AGTTGTTAAG	CAGTTGTTGA	240
ATATTTTGAG	CCAAAATTG	TTACCTCCCA	TACCTCGAG			279

(2) INFORMATION FOR SEQ ID NO:1047:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 350 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1047:

GAATTCGGCC	TTCATGGCCT	AGCAGCATTG	AAGGAATTAA	TATTAGTCAC	TGAGAACAAA	60
AAGCGAAATT	AGAAAATTTT	AAGTCACTTC	TAGGCTTGTA	GGGGAGAAGA	CGTGTAGTGA	120
TGAATTCTAT	CATTTATGAA	GTACCCACTG	GATCCCACAC	ACTGTGCAAG	ACCTTTAGAT	180
CAGGCGCCTC	CCTCGGTTTT	CTTACCCTG	TGCAGCAGGT	GCTGTTATTT	CCTTTTTTAA	240
ATTATTATTT	ATTATTATTA	TTTTTTGAGA	CAGGATCTCC	CTTTGTCACT	CAGGCTGGAA	300
TGCAGAGGCA	TGATCACTGC	TCATGTCAGC	TTTGACCACC	CGATCTCGAG		350

(2) INFORMATION FOR SEQ ID NO:1048:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 298 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1048:

GAATTCGGCC	TTCATGGCCT	AAAGCTTTTC	AGTACTGTTT	ACAAATTTGG	TTTTATTGTG	60
TCAACTTAAA	AGCATGAGTC	TAAATCTATT	AGTCATACCA	AATTGTTTCA	TTTTATTTTA	120
TTTTATAGAG	ATGGGGTCTT	GCTGTATTGC	CCAGGCTGGT	CTCAAACGAC	TAGGCTCAAG	180
CGATCCTCCC	ACCTCAACCT	CCCAAAGTGC	TGGGATTACA	GGTGTAAAGC	ACCATACACA	240
GTTCTCAAAT	TATTTTATAC	AATACAAACA	TTTAAATAT	AAATCATGCA	CTCTCGAG	298

(2) INFORMATION FOR SEQ ID NO:1049:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 367 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1049:

GAATTCGGCC	TTCATGGCCT	AGAGCTTTGG	TGCTTTTCAC	ATAAGGAACT	TACTTGGGCT	60
AAAAAGTAAC	CTCAGAGAAA	CAGTGCTCCC	ATTTGGTGGA	TAAGGAAACT	GAGGTTCCAA	120
ACATGAGATG	TAATAGCTTG	CCCCAAATCT	AGCCAGTGAG	CAAGAGAGTA	GACTTTTGCC	180
TGTGCCAAAA	CAGTAATCAC	CATCCACAAG	TGGCTATTTA	AATTTTAATT	ATTACAATTA	240
AATAAAGTTT	AAAATCCAGT	TCCCCAGTCC	CAGTGGCAAC	TTAACAGCTA	CCAGTGACTG	300
TACCATATAT	AACAGCATAT	ATAGACATAC	AGCATATACA	ACACATACAT	AGGGATTCCC	360
ACTCGAG						367

(2) INFORMATION FOR SEQ ID NO:1050:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 367 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1050:

GAATTCGGCC	TTCATGGCCT	ACAATTTTAA	AATTAAAATT	TTTTCTATTT	TTTTGCAATT	60
ATCAACCTAA	CACATTGAAG	AAACTTGGGA	AATATAGAAA	AAACACACCA	AAAAGTATCA	120

GAGTTACACT AAAATGTTCA TAGTCAGTAA TATAGTCTTT CAGATTTTTT TTTCTGTGTC	180
TGTCTGCTGT CTATGTCCAT GCCTACCTTA CTTTCTTCCC TCTCTCTTCC CTCCCCACCC	240
TCCCTTCCTT CCTTCCCTCC TTCCACCTT CCCTGCTTCC TTCTTGCTG CCTCCCTTCC	300
TGCCTGCCTC CCTTCTGCC ACTTACATTC TGTAAACAAT GAGAAAAAA TTCCCCCATC	360
ACTCGAG	367

(2) INFORMATION FOR SEQ ID NO:1051:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 340 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1051:

GAATTCGGCC AAAGAGGCCT AAGAAGACCT CAGCCTTCGC CTGAAAAGC TGACTCACGC	60
TGCCCCCTGC ATGCTGTTCA TGAAGGGAAC ACCTCAAGAA CCACGCTGTG GTTTCAGCAA	120
GCAGATGGTG GAAATCCTTC ACAAACACAA TATTCAGTTC AGCAGCTTTG ATATCTTCTC	180
AGATGAAGAA GTTCGACAGG GGCTCAAAAC GTACTCTAAT TGGCCACCT ATCCTCAGCT	240
CTATGTTTCT GGAGAGCTAA TAGGAGGACT TGACATAATT AAGGAGCTGG AAGCATCAGA	300
AGAGCTGGAC ACGATCTGTC CCAAAGCACC CAATCTCGAG	340

(2) INFORMATION FOR SEQ ID NO:1052:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 444 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1052:

GAATTCGGCC TTCATGGCCT ACTATGGACA GCCACAGNTC TTCCAGGAC AAGACCCTGA	60
CTCACCCAG CATGGAACT ACCAGGGAGG GAGGGTCCCC CATCCTACTA TGACAACCAG	120
GACTTCCCTG CCACCAACTG GGATGACAAG AGCATCCGAC AGGCCTTCAT CCGCAAGGTG	180
TTCCTAGTGC TGACCTTGCA GCTGTCGGTG ACCCTGTCCA CGGTGTCTGT GTTCACTTTT	240
GTTGCGGAGG TGAAGGGCTT TGTCCGGGAG AATGTCTGGA CCTACTATGT CTCCTATGCT	300
GTCTTCTTCA TCTCTCTCAT CGTCCTCAGC TGTGTGTTGGG ACTTCCGGCG AAAGCACCCC	360
TGGAACCTTG TTGCACTGTC GGTCTGACC GCCAGCCTGT CGTACATGTT GGGGATGATC	420
GCCAGCTTCA ACAACACACT CGAG	444

(2) INFORMATION FOR SEQ ID NO:1053:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 358 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1053:

GAATTCGGCC AAAGAGGCCT AGATATTCAT TTCCATTGGA GCTGGTATTT TTAAGGTCTC	60
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GTGACGTCAG	TGACCTCATT	TTACTTGATC	TATTAGCAGC	ATTTCATACA	GTGTGTTGACT	120
CTTCTCCATT	AAAACATTTA	CTTTATTGG	CTTCTAGGAA	ACATATTTTC	CTGCTTTTTC	180
TTCTATTTTC	TCTGACTCTT	TTCTCAGTTT	CCTTTGCTGT	TTCTTTTCT	ATCCTCTAAA	240
CATTGAAATA	TCCTAAGCCT	AGTTTGGGAT	TCCCTTGATG	GTCTTCATTT	CTTTAATGGG	300
AACTGTGCTG	GTGACTCAAA	TTTATATCTC	CAGCCAGAAC	CTTTCTCCTG	AATTCCAG	358

(2) INFORMATION FOR SEQ ID NO:1054:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 386 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1054:

CCTTCATGGC	CTACTTCTGG	TATTACATCA	CACTGATCAT	GCTGCTGGTG	GCCGTGCTGG	60
CCGGAGCTCT	CCAGCTGACG	CAGAGCAGGG	TTCTGTGCTG	TCTTCCATGC	AAAGTGGAAAT	120
TTGACAATCA	CTGTGCCGTG	CCTTGGGACA	TCCTGAAAGC	CAGCATGAAC	ACATCCTCTA	180
ATCCTGGGAC	ACCGCTTCCG	CTCCCCCTCC	GAATTCAGAA	TGACCTCCAC	CGACAGCAGT	240
ACTCCTATAT	TGATGCCGTC	TGTTACGAGA	AACAGCTCCA	TTGGTTTGCA	AAGTTTTC	300
CCTATCTGGT	GCTCTTGAC	ACGCTCATCT	TTGCAGCCTG	CAGCAACTTT	TGGCTTCACT	360
ACCCAGTAC	CAGTTCAGG	CTCGAG				386

(2) INFORMATION FOR SEQ ID NO:1055:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 104 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1055:

CGATTGAATT	CTAGACCTGC	CTGTGCTCCT	CGATGGTGTC	TCTCCCTCCA	GAAAACGCAT	60
GCTTATTGAC	CTTGGTTTTG	ATCTGCTTGG	CCGTGTCGCT	CGAG		104

(2) INFORMATION FOR SEQ ID NO:1056:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 650 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1056:

GAATTCGGCC	AAAGAGGCCT	ACACAAGGCT	AAGGGTATTG	GATATAACGG	AAAGTGGAAAG	60
CTATACCTGA	CTTCCAGAGA	ATGTGGACCG	GATATAAGAT	CTTAATCTTC	TCTTATCTTA	120
CTACAGAAAT	CTGGATGGAG	AAGCAGTATT	TATCTCAAAG	AGAAGTGGAC	CTAGAGGCTT	180
ATTTCACTAG	GAATCACACC	GTTTTGCAAG	GTA CTGATT	CAAAAGAGCC	ATTTCCAAG	240
GGCAATACTG	TAGAAATTTT	GGCTGTTGTG	AAGACAGAGA	TGATGGCTGT	GTCACTGAGT	300
TCTATGCGGC	GAATGCGTTG	TGCTACTGTG	ATAAATTCTG	TGACAGAGAA	AATTCTGATT	360

GCTGTCCTGA	CTACAAGTCC	TTTTGCCGTG	AAGAGAAAGA	ATGGCCTCCT	CACACACAGC	420
CTTGGTATCC	AGAAGGTTGC	TTCAAAGATG	GTCAACATTA	TGAAGAGGGA	TCAGTAATTA	480
AAGAAAAC TG	CAACTCCTGC	ACATGCTCAG	GACAGCAATG	GAAATGTTCC	CAGCATGTAT	540
GCCTTGTTCC	TCCAGAATTA	ATTGAACAGG	TCAATAAAGG	AGACTATGGA	TGGACAGCAC	600
AGAATTACAG	CCAATTTTGG	GGAATGACTT	TAGAAGATGG	ACTCCTCGAG		650

(2) INFORMATION FOR SEQ ID NO:1057:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 378 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1057:

GAATTCGGCC	AAAGAGGCCT	ACACGTATTG	GCCAGGATGG	TCTTGATCTC	CTGACCTCAT	60
GATCCGCCCG	CCTTGGCCTC	CCAAAGTGCT	AGGATTACAG	GCGTGAGCCA	TCGCGCCCAG	120
CTGAGAAATAG	TTTAAAGAAT	TGGTTGAGAG	GCAGTTGCTT	TTTCTTTGAA	TATCTAGAAC	180
TGTTCTGGAC	TAACGTCAAA	GAAACACCAT	GGCAACATTA	AAGGGAAGAT	TATTTGAGAG	240
GCGGGGGATA	GTATGGCTTA	GGACTTGGGC	TGCTACCTTT	GACTTTGTAA	TTCAAAAGAT	300
TGTAATGTTT	CATATTTTCA	ATCTGATCAT	TAAAAATATC	TGTGTTACAT	GCAAAAAAAA	360
ACCTATAGGC	AACTCGAG					378

(2) INFORMATION FOR SEQ ID NO:1058:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 259 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1058:

GAATTCGGCC	TTCATGGCCT	AATTTTAACA	TTTACATAGA	CAATTCATT	GGTGTGTTGT	60
CTCCTAGTTA	TTTGGCCCAA	TCTCTGATGA	TTTCCACTCT	GTCTTGGCCA	CTCACTCCGT	120
TTGTCATATC	TTGGCCATTA	TCATCACCTC	AAATTGCTCC	ATCTTCAAAA	TACTTGCATC	180
TTATTTATTG	ACCATATTCC	TTCCAATTGG	TTTATTGAAC	TATTCCCTCT	ATCATTCTCT	240
GATTTCACTG	CAGCCAATG					259

(2) INFORMATION FOR SEQ ID NO:1059:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 246 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1059:

GAAAAAACT	ACTAACCCT	GCAAGCTCTT	GTCAAATTTT	AGTTTAATTG	GCATTGCTTG	60
TTTTTTGAAA	CTGAAATTAC	ATGAGTTTCA	TTTTTTCTTT	GAATTTATAG	GGTTTAGATT	120
TCTGAAAGCA	GCAATGAAT	ATCACCTAAC	ATCCTGACAA	TAAATTCCAT	CCGTTGTTTT	180

TTTGTGTTGT TTGTTTTTTC TTTTCCTTTA AGTAAGCTCT TTATTCATCT TATGGTGCAG 240
CTCGAG 246

(2) INFORMATION FOR SEQ ID NO:1060:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 103 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1060:

GAATTCGGCC TTCATGGCCT ACGAGAGTAT ATTGGTAGGG CTGGAATTTT TGGTTCATAT 60
GGTAACTAAC TCTATGTTGA ACATTTTGAG GAGCCCTCTC GAG 103

(2) INFORMATION FOR SEQ ID NO:1061:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 361 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1061:

GAATTCGGCC TTCATGGCCT AAAAGGTTAG GCAATCACTG GGACCCGCAT GGTGTTTCCTC 60
CAAAGAATAG GGTAAAGGAG AGCTGGGAGG GAGCCCTCTC CGTTGGGTGA CTCTTGTTGTG 120
CCCTTTAGAC AGGCTGGCCT GCCGGTTCCA CAGGGTACAG TTAGGACTTG AGTCTTTCTT 180
TTTCTGTTTT GAGTTGGTGA GTGAGTGATA GGGTAACATG GGCCTTCAGG ATGACCCCTT 240
GGAAGTGTGC CGAGTTCCTT AAATCTCAGC TGGGATCCTG GACCTGGGAG GCCCCTGTGA 300
GGGCCAGCTC TGGAAAAACC TGGGAGTTGA TGCCGGAGGC TGTGGAAGAA CTCTGCTCGA 360
G 361

(2) INFORMATION FOR SEQ ID NO:1062:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 292 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1062:

GAATTCGGCC TTCATGGCCT AAGAAAAATT GGAACAAGC TAAGTGCCCA CATAGTTACA 60
AAAATTACGT TAAATAGATA CACGGTTGCT TTAAAGCTCC ACATACAGCA CCATAGAGCT 120
TTTTATATAT TTGTAGGCAT TAAAGCAATT CCAGGAAGGA TCTAAACCAA ACACCTTGACC 180
CAGGTGTCT CTCTGGGGAG TGGAGCCACA TGGGATTTC A TGTTTCTGT ATTCTTATTA 240
CTTATATTAA AACACACATG AACAGAAGAA AAAATAGCCC CAGTATCTCG AG 292

(2) INFORMATION FOR SEQ ID NO:1063:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 331 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1063:

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GAATTCGGCC TTCATGGCCT ACCGTTGTTA CACTTCTGGA CACAAGTTGG GCCGAAGTAA      60
GCCAAGCCCA GTCCTTCCTG TTTCTTTTCT CAGGAAATGT GACCACGTGC ACTGGGAAGC      120
TTTGTGTAAA GTAGATAGGG GTATGAGCCA ATTGCCCAGC ATTGGTGTTC TGTTTTTTGT      180
TTGTTTGTTC GTTTTCACAG AGTCTTGCCC TGTCACCCAG GCTGGAATGC AATGGCGTGA      240
TCTCAGCTTA CTGCAACCTC TGCCTCCAG GTTCACACAA TTCACCTGCC TCAGCCGCCT      300
GAGTAGCTGT GATTACGGGC ACCGTCTCGA G                                     331

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(2) INFORMATION FOR SEQ ID NO:1064:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 136 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1064:

```

CGAGTGTTAC ATTCGTTCTT CCGCTCAAAT CCTGATCTGG TCCATTAAAG AGTGTTTCGA      60
GACAAAGTTT CTGAAAGATT AGAGAAGAAT CCCCCAAGAA TCAATTACAA CCAAAATGGA      120
AAGGGACAAC CTCGAG                                     136

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(2) INFORMATION FOR SEQ ID NO:1065:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 255 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1065:

```

GAATTCGGCC TTCATGGCCT AGAATAAAGG AAAATTCAGG TCATAGATTG AGTGCTATAT      60
TTGAAGTAAA TACAGACCTT CAAAAAATA TAATATCAAA AATCACTGCT GAGCTCTCCT      120
GGCCTTCCAT ACTTAGCTCA CCCCAGCACT TGAAATTTCC ACTTACTAAT ACAAACTGCT      180
CCTCAGAAGA AGAGATTACT TTAGAAAATC CTGCAGATGT TCCTGTCTAT GTTCAGTTTA      240
TTCCTCTGGC TCGAG                                     255

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(2) INFORMATION FOR SEQ ID NO:1066:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 379 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1066:

GAATTCGGCC	TTCATGGCCT	ACAACCTGCT	TTCCACCTTC	TGTAATCTCC	CATCAGTGAT	60
AAATTACCCA	TCAGCTTTCC	AGATTCCAGA	ATTTTGCTGA	CATCTCCTGT	TGGCTATGTT	120
CTTATTTCTT	TTTCTGTTTA	TTCTGTGAC	CTGTGCCCT	TTAATCTTT	CCCATAATTT	180
GTTGGGACTT	CAGAAGGAAG	TGGAGCTAAA	GGCATGTGTC	TGCCTGCCCC	ATCTTGGCTG	240
GAAGTTGGGA	AGGCCTTCCT	TCCAAGGCAC	CCAGCATAGC	ACCTGGCACA	TGATGGATGC	300
TCAGCAAATG	TCTGTGGGTC	TTCTTTTAC	TAAACAGGCA	GTTGATTTC	CCAGAAGTAG	360
TGACCACCTA	AGTCTCGAG					379

(2) INFORMATION FOR SEQ ID NO:1067:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 316 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1067:

GAATTCGGCC	TTCATGGCCT	AACACAGCTC	ACATCAGAAT	ATAATAGTGG	AACTAGGGTG	60
ACTTCACTCC	CTTTCACCTG	ATGTCTATCT	TGGCCTTTTA	GCACCTTGAC	TATCCCTGAA	120
AAGACTGGGT	CTTTGTTTTT	CCAGGGAAAA	AACGAAGTGA	TGTAGATCTA	AGAAATAGTG	180
CCTCTTTAAT	ATTTAATTCT	TACATGACAA	CTAACACACA	GGGAAAAGGC	TATGTTAAGT	240
TGATTATAGC	TCCTCTTAAA	ATGTCCTATG	CTGTCAGTTG	GTCTTAGAGA	CATGGGAATA	300
ACCAAGCAAT	CTCGAG					316

(2) INFORMATION FOR SEQ ID NO:1068:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 299 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1068:

GCGATTGAAT	TCTAGACCTC	ACCTCTGATC	TATCTCTTTT	ACCTCAGCAA	TTTATTTCCC	60
AATTATTATA	TCTACTTTAT	TGTTCTTATG	AGACAATAGA	CTATGATAAT	TTCCAGAAA	120
TAATTTTGTT	TTCTTCTCC	CATCTTCTAA	TGTTGAGACC	GTTTCTCTGT	TTTCTTTCAT	180
CTCTACCCCT	CAGTCTCATA	GGTTTATTTC	TCATTTCCAA	TCCAGCGATT	TCAAAACCTG	240
TACAACAAAC	CAACTCAGCA	GCCCTTGCCA	ACTTGAGGAG	ATTTCACAAA	CCACTCGAG	299

(2) INFORMATION FOR SEQ ID NO:1069:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 256 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1069:

GAATTCGGCC	TTCATGGCCT	ACCATTTC	CAACCATTTT	AATCTGCGCA	TCGGTCCCAG	60
ACGTAGGGAT	TCCTCGTCTC	ATCTTGGAAA	CATTGCCAGC	AGTGGTTCTG	ATTTGGAAGC	120
CTGCGTCTGT	CACGTGACAC	CGTCTGAGCC	TGTGCCTGCC	TCTCTTTCTT	CCGGCAGTGC	180
CCTGTACTCT	GTGGGGATGA	CGGCAGTGGG	CCTGGCCATC	CTGTGGTATG	TTTTCCGTCT	240
GGCCGGGAGA	CTCGAG					256

(2) INFORMATION FOR SEQ ID NO:1070:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 321 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1070:

GAATTCGGCC	TTCATGGCCT	AGCCATCATG	TTTATTAGAA	GGTTGGATTT	TGGTGTGTGC	60
TCTAGACAGA	TACAGAATAA	ATACCTGCGC	CTTGAGAACA	GGAAGTCCAC	GATTCATACA	120
AAGTGCTCAC	TACAGGAAGT	TGCTGTGTCA	AAATCCAGGC	AAGGACCCAA	CTCCGGGCAG	180
CCCTCTCTCC	CTGCTGACCT	CAACAAGGGC	TGTGCTATTG	TTTTTTATTT	TATTATTTTA	240
TTTCTCTTTA	TTATTATTAA	TATTATTATT	ATTTGCTTTT	GCTGTGGTCA	CTATCATTGG	300
CAAAGTTCCT	TTTCCCTCGA	G				321

(2) INFORMATION FOR SEQ ID NO:1071:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 261 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1071:

GAATTCGGCC	TTCATGGCCT	AGGGAGGTAT	TTGTCAATTG	GAAAAGCTGG	GAATCTCAAA	60
CATAGTCAAC	TAACTAAAA	AGAAGCTAAT	ACAGGTTGAG	CATTCCTAAT	CCAAAAATCC	120
AGAATCCAAA	TTGCTCCAAA	ATCTGAAACT	TTCTGAATGC	TGACCTGATA	CTACAAGTAG	180
AAAATTCCAC	ATACAAGTAC	TTAACACAAA	CTTTGTTTCA	TGCACAAACT	ACTAAAAATA	240
TTGTATAAAA	TTAACCTCGA	G				261

(2) INFORMATION FOR SEQ ID NO:1072:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 304 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1072:

GAATTCGGCC	TTCATGGCCT	ACTTGGGCTC	ATTTTATTTG	GTGAATTGGA	TCCTGGCTGT	60
GGTGGCCATG	GCCTATGAGG	AGCAGAATCA	GGCCACCTTG	GAAGAAGCAG	AACAAAAAGA	120
GGCCGAATTT	CAGCAGATGC	TCGAACAGCT	TAAAAAGCAA	CAGGAAGAAG	CTCAGGCAGT	180
TGCGGCAGCA	TCAGCTGCTT	CAAGAGATTT	CAGTGAATA	GGTGGGTTAG	GAGAGCTGTT	240

GGAAAGTTCT TCAGAAGCAT CAAAGTTGAG TTCCAAAAGT GCTAAAGAAT GGAGGTCCT 300
CGAG 304

(2) INFORMATION FOR SEQ ID NO:1073:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 397 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1073:

GAATTCGGCC TTCATGGCCT AAAAAAGCTA ATGTCATAGG TCTTTATATG TGGGCAGGGT 60
TTATAAGTTG TCTAAGGGC CATCAGGTAG AGTTGGCCTT TTCTGTTGAG GTCCCTTAAA 120
TTTCAGTGGA GGTCTTCTCT TTGGGGCCAG TTTCTCTAGA AAAGTGGGTC CTGATAGTAG 180
GGTAAGAAAA GACAGCTGAG GACCCCAAGA TTTGTATGAT GACTTTTACT TAATCCCTCT 240
ATCTTCATCC TCTCTCATGC CCATCCGGCC CCACCCCCA AATCCTCCTC TGGCTGCTGA 300
CCCTCAGGTT CAGTTTTTCC TGTCAGTGGA GGTTGAGGGT GGGGCGTAGG CTGGCTGTGG 360
AGAGTAGGGG AGAGGACCTG GGTTCAGTA GCTCGAG 397

(2) INFORMATION FOR SEQ ID NO:1074:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 309 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1074:

GCGATTGAAT TCTAGACCTG CACCACTGCG ATCCCTACGC CTGAGGAAAT GACAAGATTG 60
AGAAGCATGA ACAGACAACT CCAGATAAAT GTTGACTGTA CACTGAAAGA AGTTGACCTC 120
CTTCAATCTA GAGGAACTT TGATCCAAAA GCCATGAATA ATTTTATGA CAACATAGAA 180
CCTGGCCCAG TTGTACCACC CAAGCCATCT AAAAAAGACT CCTCAGACCC CTGCACAATT 240
GAGAGAAAAG CCCGAAGAAT TAGCGTGACC TCCAAAGTAC AGGCAGACAT CCATGACACC 300
CATCTCGAG 309

(2) INFORMATION FOR SEQ ID NO:1075:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 243 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1075:

GAATTCGGCC TTCATGGCCT AGAAAACTAA ACATTTCCTT TTTATAAAGA CTGACAAAAT 60
ATAAATCTTT ATTCTAACCC TATCCCCAAA ACTAGCCAGG CCACACCCCA GATGTTCTTA 120
TTGACTATTG GGAAGATAGA AAAGGCGTTG TGTTTTTGT TTTTGTGTG TTGTTGTCAT 180
TGTTGTTTTT TCAGAAGACC AGTGTCTCAG TTCTGTCTTA GTAGTACCAC ACCACGACTC 240
GAG 243

(2) INFORMATION FOR SEQ ID NO:1076:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 598 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1076:

CTCGAGCTGG	GGGCCACTTT	GGCACCTAAC	AAAACCAGAG	AAAACAAGTG	CAACTAAGCA	60
AGCAACTATG	CACATTCCAG	ACATAAAGAT	CATTAATAAA	CGCCTTAATC	TAAGGATCTG	120
TTGGTTCTAA	CGCCAGAAAA	AGAAGTTAA	TTTAAAAAA	TATCTAAAAG	AGATTTTAAAG	180
TGGGCAAGCA	ATAGAGAAGA	TACCCAACAC	TGAGAAACGG	AAAGGAAAAA	AGACCAACCT	240
AATAACTACT	GCTCATCAAT	ATACATCTAT	AATTCTACCA	GAACAGTATT	AAGAAATGAG	300
AAACGCCAAT	ATTACATAAA	ATAAGGTAA	AATAACTAAG	CATAGGTTAG	TGTCAGGGGA	360
CCTAGGGTTC	AGACACCCAG	AGTTTTATAT	AAGGATAATT	TGTCCTGAAT	CAAGACCACA	420
CTGTCCTCTC	CTTAAACCTA	ACTGCTACAA	GCAGACACCA	CCTCTTCTGA	CTGGGCTGAA	480
GTGTGGGAAA	CAGTCCAAAA	ATTAGGTATC	ACACCATAAA	CCCTCCACAA	GAGCAACCTT	540
TGCTCTCAAT	TAAGTTGTTG	ACAAAATAAT	TCTCAACTTG	CCTAGGCCTG	CCGAATTC	598

(2) INFORMATION FOR SEQ ID NO:1077:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 346 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1077:

GAATTCGGCC	AAAGAGGCCT	AGGTGGGTAT	TTGAATGGTT	TTGCTCCAAA	ATTGAACTCA	60
CATTGTTGAT	ATGACATGAA	ACTAGCTGCA	GCAAAAAATC	CAGATACAGT	AGATGAAAAG	120
ACTTGCTTTT	CAGGAGGCAG	CTGGTTGCCA	TTTAAAAAGA	AGATCATTTG	CTTTTCATTC	180
AAGTCTAACA	GAAATCCTAC	TGTATCTCCT	TCTTTCCAGC	ATGGGTGTAT	GTGAGGCTTA	240
CTTCTGGCAT	TGTACCAAT	CAGCTGCCGG	CAGCCATCAT	ACGCACAGGA	GTATTCATCA	300
TCCCAATGC	CGTAGCCTTC	ATGATTGAGG	AATTTGCTGT	CTCGAG		346

(2) INFORMATION FOR SEQ ID NO:1078:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 419 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1078:

GAATTCGGCC	AAAGAGCCTA	GCTCCTGTTA	CCATTATTAT	TATTCATACT	CATATTCATT	60
ACTTCTAACT	TCAAGTGGGC	CATTAGCACT	AACTGGCATA	CCACACTTCT	CTAGTCTATT	120
TATTCTCCTT	GATGACTATT	TCATACCCTT	CCCTCTTTCC	CCAAACTTCC	AACACCTCCT	180
CTTCCCATCA	TTCTCAGCTG	ACGGCCTTGC	TTTCTCCCAT	GATTGGGACT	AGAGAAGCAA	240
TTTGTAGGGA	ATTTCCACAA	GCTCCATCAC	ATGTGGCCAC	TCATCTACAT	CTGGATCCAT	300

CTATTTGGCC TTCCCTATTG TTCTTATACA CTCTCCCTGT CTTACTTTAT CTAAGGTCAA 360
CATCTCCACT CCACTTATGC ACTAGATCCT GGCATTACAC CAGCAATCCT CACCTCGAG 419

(2) INFORMATION FOR SEQ ID NO:1079:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 261 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1079:

GAATTCGGCC TTCATGGCCT AGCTTATTCT TTTTCTTTT TCTTTTTTTT TTTTTTTTTC 60
GAGACAGGGT CTTTCTTTGT CACCACAGGC TGCAGTGCAG TGTGTGTATC ATAGCTCACT 120
GCAGCCCTCA ACTCCAGGCC TCAAATGATC CTTCTGACTC AGCCTGCTGA ATGACTGACA 180
TTACACGTGC ATGCCGCTGT GCCCAGCTAA TTTTAAATT TTTTGTAGAG ATGAGGTCTT 240
GCTTGTTGC CCAGACTCGA G 261

(2) INFORMATION FOR SEQ ID NO:1080:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 208 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1080:

GAATTCGGCC TTCATGGCCT ACATTAACAG ATTAATCCAT CTGTATAGGG CTTTGTCTGT 60
TGGATAGAAT TTAAATTGTC TACATAAATA TTTGTTTTAG GACCCTTAGA TTTTATCTGA 120
ATACACAGAT TAGGCTTTAA AAACAGATAT ATATGTCATT TTTGGCTTAA GGAGTTTGGC 180
TAAGTTAGCT TTTCAACTGG TTCTCGAG 208

(2) INFORMATION FOR SEQ ID NO:1081:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 425 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1081:

GAATTCGGCC TTCATGACTC CTGATTCAGG GGTCACTTTA CTTCATAAAA AATCATTAGA 60
AAAGGAAGAA TTATGCCAAA GACTTAAAGA ACAGTTAGAT GCTCTTGAAA AAGAACTGC 120
ATCTAAGCTG TCAGAAATGG ATTCTTTTAA CAATCAACTA AAGGAACTGA GAGAAACCTA 180
CAACACACAG CAGTTAGCCC TTGAACAGCT TTATAAGATC AAACGTGACA AGTTGAAGGA 240
AATTGAAAGG AAAAGATTAG AACTAATGCA GAAAAAGAAA CTAGAAGATG AGGCTGCAAG 300
GAAAGCAAAG CAAGGAAAAG AAACTTATG GAAAGAAAAT CTTAGAANGG AGGAAGAAGA 360
AAAACAAAAG CGACTCCAGG AAGCCAAGAC ACCAGNAAAA ATTCCAAGAA GAGGAACGTC 420
TCGAG 425

(2) INFORMATION FOR SEQ ID NO:1082:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 299 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1082:

GAATTCGGCC	TTCATGGCCT	AAGACTTCTT	GCAGGAAAAA	TGAGTGCATT	GAGGATAGTA	60
ACCTGACTTT	CTGACCTGTG	ATTAAATTAT	GATAGTAGTC	AGTCATTTTA	CTCTCCCAGG	120
GTTTGAGGAA	GTGGCCGGTG	AGGACTTGGA	GCCTAGTGAG	GAGTTAGTAG	AGCTGCCCAG	180
GGTGGAGGAG	GCCACAGAGG	ACAGCCCTGG	TGAAGAGAAC	AGTGAGGCCT	TGGATGTGTT	240
GATATCCAGC	AAGGACCTGG	CACTGTCTAG	TGAGGACGAG	GCCTGCACAG	GATCTCGAG	299

(2) INFORMATION FOR SEQ ID NO:1083:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 444 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1083:

GAATTCGGCC	TTCATGGCCT	AAGTCACTTG	TGTAACGTAG	TTATACTTTG	CTGCATTNTA	60
ATTAACCTTC	AACAGCTATT	AAAGTGGAAT	GTAAGTTAA	TTTTGAAGGA	AAGGAAATAA	120
ATGTTTTCCA	TATTTCTGCT	TGATTTACTT	TCTGTATGAG	AACAGCTGTG	TTTTTGATAG	180
GTTTATGGTT	TGCATGAGTT	CATATTTAAA	GTGATCCAGG	CCAATGCATG	GCTATTGCTG	240
TAAATCTTGA	TGTTTATTTT	TGCCTTGTA	AGTTCTATCA	CGGCCTACCT	GGAATTTAAA	300
ATTCAGTAGA	CAAATTAATT	GGTCCTCTGC	ACAACCTTTT	TAATAAGTAG	ATTATTTTAC	360
AAAGAAATTT	GAACAAATTT	AATTGAATCT	TTTGTTTAGC	TGCTCTCTAA	GAACCTTTTCT	420
TAATAAAGCT	CCCAAACACT	CGAG				444

(2) INFORMATION FOR SEQ ID NO:1084:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 268 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1084:

GAGTGAGACT	CCCTCTCAAA	GGAAAAAAA	AAGTTTTCTA	GGATCAAAAT	AGGAAAACAG	60
TTGTTTCAGA	ACTCATGATA	TGAGTCATGA	CTACAACCCA	CCATATTCAG	TAAAACCTCA	120
CCTTGTCCTG	TTGTCTGACA	TTAAGTGTTT	TACGAGATCC	ATACCTGTGA	AATCAGCTCC	180
TCTGGAATGA	CAGATGCTGG	AATAACTGGC	TGGGGCTGAC	TGCCCAAAG	CCCAGACCCT	240
CGATCCCGTC	CTGTCCGAAT	AACTCGAG				268

(2) INFORMATION FOR SEQ ID NO:1085:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 251 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1085:

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GAATTCGGCC TTCATGGCCT ACTTTAAGTG AACAAACANCA ACAAAAAAGT TAAGGGTAAG      60
ATGAGGCAGC TTTTCAGTGG AAAATACTTG TCTTGGGGAC AGTATGTCAT GTCCCTATAC      120
CTGGTGCCAT TGATAAGGTT ATTCATTCAA CAATATTTAC TGATCACTGG CATATGCCAA      180
GCACTCTGCC AAGTACTAGG GATATAAACA TTAGAAAGAC AAGTTCCTCC CTTTTCAGTC      240
ACGATCTCGA G                                     251

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(2) INFORMATION FOR SEQ ID NO:1086:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 258 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1086:

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GAATTCGGCC TTCATGGCCT AGAGCTTCAC GGAGGCAAGA GGGTAATGGA GTGCCTAAAA      60
AAAGCTCTAA AAATAGCAAA TCAGTGCATG GACCCCTCTC TACAAGTGCA GCTTTTATA      120
GAAATTCTGA ACAGATATAT CTATTTTAT GAAAAGGAAA ATGATGCGGT AACAATTCAG      180
GTTTAAACC AGCTTATCCA AAAGATTCGA GAAGACCTCC CGAATCTTGA ATCCAGTGAA      240
GAAACAGAGC AACTCGAG                                     258

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(2) INFORMATION FOR SEQ ID NO:1087:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 391 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1087:

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GAATTCGGCC TTCATGGCCT AATAAAAAGA ATTATCAAAG AATTGCAGGG GAAACCCCAT      60
AGAGAAGACT CATTCTTAGA TGAGTATACA ATCCATGGGG GTCTTTAGGA TATTTAACTG      120
ATTTGGGAGA GGTCCGATAA AGAAAAAGGA GCATTAACCT TGAATATGCC TTTAGCTCCA      180
GCCGCCTCTT TAAGAGGAAA TTGTTGGGCA GGTGGGGGAA GGCTAGTCAT GGAACGAAAC      240
TGTAAGCCAG ATCGGGTGTG AGGAGGGGAG GTGATAAAAG GATTATAGGG TGGGAGAGCA      300
CAGGCTGAGG AAGAATTGGG ACCTGGCTCA GCCTGGCAAG GCACAGCCTG GGGAGGAGGG      360
GAGAGGTCCT GTAGAAAAGG AGGATCTCGA G                                     391

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(2) INFORMATION FOR SEQ ID NO:1088:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 368 base pairs
- (B) TYPE: nucleic acid

- (C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1088:

GAATTCGGCC	TTCATGGCCT	AGCCTTCNAA	GTTTGAATGG	CCCTTAGGTT	TTAAGTTATC	60
TATGCAAAGA	TGAANAAGGC	CTTCACATT	TCAAAGGTGA	CAACTCATAC	CCAGCCATTT	120
GCTTATTTTT	GCCTGCAGAC	CTCCAATGGA	AGTCCGGGCA	CATGGCGGAG	AGCCTCACCA	180
ACATGCCACG	GCACTCCCTC	TACATCATCA	TTGGAGCCCT	CTGCGTGGCC	TTCATCCTTA	240
TGCTGATCAT	CCTGATCGTG	GGGATTTGCC	GCATCAGCCG	CATTGAATAC	CAGGGTTCTT	300
CCAGGCCAGC	CTATGAGGAG	TTCTACAAC	GCCGCAGCAT	CGACAGCGAG	TTCAGCAATG	360
CACTCGAG						368

(2) INFORMATION FOR SEQ ID NO:1089:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 409 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1089:

GAATTCGGCC	TTATGGCCTA	GTTCAATTAA	CTAATACTTG	TATTAAATCA	CTTCTAAATG	60
CTTATTATAC	CCTGTATTAT	AGTATTATAT	TCTGAGTCTT	AAAGGTGCTT	AATGTGAAGA	120
TTCTCTCTCT	ACATATTCAA	CTCTTACTAA	CTTTTGGCTT	TAGGTAGAAA	TCAGTTAGTG	180
TATTATATGA	TAAAATAGGA	AACTATTTCC	CTAGGGGTAT	AGGTATTCAG	TAGGGAGCTT	240
TGGAGTCTCA	ATGAGCTTCT	TAAAGAAGCA	TTTTAATGG	TAGGTTTATG	GGAGAGTTTT	300
TGTAGTAAGA	TAAAGTAGAT	GAGAAAGTGT	TGCCTCTAAA	CAATCAACAA	GCTGGGAATG	360
GGGTGCAGAA	TGAGGAGAAC	CCTAAGCAAT	AGGCAATAAG	AAGCTCGAG		409

(2) INFORMATION FOR SEQ ID NO:1090:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 359 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1090:

GAATTCGGCC	TTGGCCTAGT	GAGAGAGCGT	CAAAAAA	ACTTCCATCTCAG	CCAACCACTG	60
ATACTAGTAC	TGACAAAGAA	AGAACTTCAG	AGGACATGGC	TGATAAAGAA	AAATCTACAG	120
CTGACTCTGG	AGGTGAAGGA	CTGGAAACAG	CCCCAAAGTC	TGAAGAGTTC	AGCGACCTCC	180
CCTGTCCAGT	CGAAGAAATT	AAAAATTACA	CAAAAGAGCA	TAATAATTTA	ATTCTGCTAA	240
ATAAGGATGT	TCAACAGGAA	AGCAGTGAGC	AAAAAATAA	ATCAACAGAC	AAAGGTGAAA	300
AGAAGCCAGA	CAGCAATGAG	AAAGGAGAAA	GAAAGAAAGA	AAAGAAGGAA	AAGCTCGAG	359

(2) INFORMATION FOR SEQ ID NO:1091:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 280 base pairs
 (B) TYPE: nucleic acid

(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1091:

GAATTCGGCC	TTCATGGCCT	ACATGTTTCAT	TCTAAGAAAC	TTAACTCCAT	TTTAAAGCTT	60
TAAGATTCCC	CCGATCCCAA	ATAACCTAAC	ACACCAAAAG	CCTTGCCATT	TCACACATGC	120
TGTTCCTTTG	CTTAGAACCT	TTTCAATGTC	TAGCTCACTC	TGTTTGGGAC	TTCTTTTTC	180
TTTTCTTTT	TTTGAGACAG	GGTCTGGCTC	TGTCATCCAG	GCTGGAGTGC	AATGGGGCAA	240
TTTCGGCTCA	CTGCAACCTC	CGCCCTTCCA	GGCTCAAGCG			280

(2) INFORMATION FOR SEQ ID NO:1092:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 443 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1092:

GGAAAATTGA	GAAAACCATG	AAAGAAAAAG	AAGAACTGTT	AAAGTTAATT	GCCGTTCTGG	60
AAAAAGAAAC	AGCACAACCT	CGAGAACAAG	TTGGGAGAAT	GGAAAGAGAA	CTTAACCATG	120
AGAAAGAAAG	ATGTGACCAA	CTGCAAGCAG	AACAAAAGGG	TCTTACTGAA	GTAACACAAA	180
GCTTAAAAAT	GGAAAATGAA	GAGTTTAAGA	AGAGGTTTCA	TGATGCTACA	TCCAAAGCCC	240
ATCAGCTTGA	GGAAGATATT	GTGTCAGTAA	CACATAAAGC	AATTGAAAAA	GAAACCGAAT	300
TAGACAGTTT	AAAGGACAAA	CTCAAGAAGG	CACAACATGA	AAGAGAACAA	CTTGAATGTC	360
AGTTGAAGAC	AGAGAAGGAT	GAAAAGGAAC	TTTATAAGGT	ACATTTGAAG	AATACAGAAA	420
TAGAAAATAC	CAAGCTTCTC	GAG				443

(2) INFORMATION FOR SEQ ID NO:1093:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 256 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1093:

GAATTCGGCC	TTCATGGCCT	ACCTCCATTG	TATATTAACA	TTTATCATAA	TTATTATTTG	60
CTCATTCAAA	AAATATTGCT	CTGATATGGT	ATTGAATATT	CCTCACATAG	GAAAATATGA	120
ACAGTTTATT	TGCCACCCAG	ATGGTTTGGA	AGCCTATACC	CTCCAAGACA	TTGAGAAAAG	180
AAAAATCTTT	CTCTCAGGAG	AGAGAATGAG	TGCCAAGCAA	TGGGAGAAGC	CCCTTAAAAA	240
ACCATCAGAT	CTCGAG					256

(2) INFORMATION FOR SEQ ID NO:1094:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 454 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1094:

GAATTCGGCC	TTCATGGCCT	AAGCTGTTAG	TGATTCTGAC	ACCCTTGGAC	CTCCAGGAGT	60
AGCTCCTCCT	GCCACGAGAG	GACTCTGGCT	TTTCTAATAA	GGAAGGTTCT	GGCCAATCAG	120
TCCAAGAAAG	GCCCGGATTG	TCTTCCAAGG	TGTTGTCTCT	GCAGAAATGT	TCCTCAGGGT	180
GGAAGGTGCT	GCTGCAGCAA	GGGATGTCCC	CTGAGTTTTC	AGGTATGTAG	TCTGTGGCTG	240
CAGCAGGTGA	ACACTCCTCA	CACTCCCATT	TCTTACTGTT	AGATCTAAGA	GAGGAGCAGT	300
CCCTGTGGGT	TCCGTGGGAT	CCGCATGTAG	CACACAGAAT	GAGGCACCAC	CTCCCTTCAT	360
CCTCAAAGCT	GTCTCTGCCT	TGTTCATACA	GACAGATGGG	GGCATCACAG	TGCTGATAGC	420
GCTGATATAA	GTCTGAGAAA	GCCCCTGGCT	CGAG			454

(2) INFORMATION FOR SEQ ID NO:1095:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 449 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1095:

GAATTCGGCC	TTCATGGCCT	AGTGATCTCA	TCTCTCCGTC	CATGGGCGAA	AAAACAGCCA	60
TCACCAGGCC	ATTCACGCTT	TGTGCTTTTG	TTAGCAGAGC	CCAGGCAGCC	CTGCAGCCCA	120
CATCTAGGGT	ACAAACGGAA	CGGCGGCGTT	TTCTTGTAT	CATTTAGAGG	AAATTTTGA	180
GCTGAACAGT	ATTTTTTTTC	TCCCTCTCTC	TCTCTCTGAA	ATATTGCTGA	GATTTAAAGG	240
AGGACGAAGA	CAACAGATTC	ATAGCTGGGT	CTTGCTGTTT	TCCTGACGCT	GACCACAGCG	300
GATCTAGTTT	CTCTGCAGAA	GACAGCAAGA	TGCCCCAGGG	AATGTTTGTG	AAAAAGGATG	360
ACTGGATGGG	AAGCAAGCTG	AAGAAAAAGA	AGGAAAGAAA	GAGAGAAATC	AGTAAATCAC	420
CACACAAGAG	GTGGAGAAGA	GGACTCGAG				449

(2) INFORMATION FOR SEQ ID NO:1096:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 166 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1096:

GACTGGCCGC	AAGGGACGGG	TTGTGAGCAA	TGATGATGGA	AGCATATCTT	ATGAGTCAAG	60
ATCTGAACTT	GATGTGCCTG	TGGAAATACT	AAACATCACA	GAAAAACAAC	GATTTATGGA	120
TGGAGATAAG	AATATTGCTA	TCATCTCAGA	AGCTGCCATG	CTCGAG		166

(2) INFORMATION FOR SEQ ID NO:1097:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 501 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1097:

GAATTCGGCC	TTCATGGCCT	ACATTATTTA	CACCTGTCCC	AGACTTTGAT	TCAGGAACTA	60
ATGCTGCAAA	GCAAGGACTA	TGATGGAAAA	TGCTCACTGC	AAGAATGGTA	GCTGCAGCAA	120
GATCAAGATC	CCAGAAAGCA	GTGGCCAAGG	CACTCACTGT	AGACTTTAGT	GCCTGCAGCA	180
TCTGGTGCAA	GCTACACTGT	CTACGCCCAG	GAACACAGCA	GCAGCATCCG	GCCTGGGCCA	240
ATTCTGTGTA	AGATTGATG	CGCTGTCCCT	GGCTGCAGTG	CCTGCAGACA	TCTCTCTCTA	300
GCCCTTCTAA	CAATTTCA	GCAACTCAAC	ATCTTTAAAA	ATTTATTAGC	CAACCAAAAT	360
CAGCTTCTGT	GGCATGCAAG	TAAAAACCCA	GGCTGATATG	TCTGAATACA	GAAGATTTAT	420
ATTAGTTCCT	TAGAGTCAAT	AATCCATACA	GACTCTATTC	TAGCTTCTTT	GTGAAGTGGG	480
TAGAATTCC	TCTGCCTCGA	G				501

(2) INFORMATION FOR SEQ ID NO:1098:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 282 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1098:

GAATTCGGCC	TTCATGGCCT	ACTTCAAAAA	CATATATTAA	TATTTTGTGA	CCACGTAAGT	60
TCATCAGAAG	CCTGACTTTA	ATCTCTGATT	TATTATATTT	GAACACTGTG	AAGAAGCAGT	120
TTAACTACTGA	ACGAAAGTGT	CGTAATGCAG	CTTTCAAAGT	GGCCATTAAA	GACAGATCTC	180
TGCTTTTCTA	TTAGTACATT	TTCTAAGATG	ACTATCATTG	CCATTGTAGT	CAGCTTTGTG	240
TACCTTTATA	GAGATTCCAG	TATAAACCCA	GAAACGCTCG	AG		282

(2) INFORMATION FOR SEQ ID NO:1099:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 266 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1099:

GAATTCGGCC	TTCATGGCCT	AGGAAACTTT	TCAAAGAAGT	AGTCCACGAG	AACTACCTTG	60
AAAGAGCAAA	ACCAGCCAGG	TGCAGTGGCT	CACGCCCATA	ATCCCAGCAC	TCTGGGAGGC	120
CCAGGTGGGT	GGATCTCGTG	AGGTCAGGAG	TTCAAGACCA	GCTTGGCCAA	CATGGTGAAA	180
CCCCATCTCT	GCTGAAAATA	CAAAAGTTAG	CTGAAAATAC	AAAAGTGGCA	CATGCCTGTA	240
ATGCCAGCTA	CCGGGAAAGG	CTCGAG				266

(2) INFORMATION FOR SEQ ID NO:1100:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 310 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1100:

CTCGAGCGTA	TCCCAGAACT	TAAAGTATAA	TAATAATAAT	AATAATAATA	ATAATAATAA	60
TAATAAAACC	TTCCAACAAG	CTTCCTTTCC	ACCACAGGAA	ATCCTGTTGG	GAGTTCCCCC	120
TGAACCAAAA	AAAAAAAAG	ATAGAGTATA	AAACATACAC	TTTTCAGGAA	TGCTTATTGG	180
GTAATGTAAG	ATAACACCTC	AAAATGAAAC	TCAGAATTTT	ATTTTATTTT	ATTTTTTGAG	240
ATGGAGTCTC	ACCTAGGCTG	GAGTTCAGTG	TGTAATCTT	GGCTCACTGT	AGGCCATGAA	300
GGCCGAATTC						310

(2) INFORMATION FOR SEQ ID NO:1101:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 367 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1101:

GCGATTGAAT	TCTAGACCTG	CCTCGAGTGT	ACCTCATTCT	GCCATCTCTG	ATATTATGTC	60
ATCTGATCAA	GAAACTTACT	CTTGTAACC	TCATGGACGG	ACTCCACTTA	CCTCAGCTGA	120
TGAGCATGTA	CATTCCAAAC	TGGAAGGAAG	TAAAGTAACG	AAATCTAAGA	CTTCTCCGGT	180
GGTATCTGGT	TCATCTAGTA	AATCAACCAC	CCTTCCAAGG	CCACGACCTA	CCAGGACTTC	240
CCTCTTGCGC	AGAGCACGAC	TTGGTGAAGC	TTCAGACAGT	GAAGTTGCTG	ATGCTGACAA	300
AGCATCTGTT	GCTTCTGAAG	TATCCACAAC	AAGTTCTACA	TCAAAACCTC	CCACAGGAAG	360
GCTCGAG						367

(2) INFORMATION FOR SEQ ID NO:1102:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 368 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1102:

GAATTCGGCC	TTTATGGCCT	AAGAAAGCAA	GAAAGCACGA	AAGCAATCAA	GCAAGAAAGC	60
AAGCAGGAAA	GAAACAAAAG	AAAGAAAGAA	NGCGAGAAAA	CAAGAAAGCA	CGAAAGCAAG	120
CAAGCAAGAA	AGCAAGCAAG	AAAGAAACAA	AAGAAAGAAA	GAAAGAAAGN	AAACAGGAAA	180
GCAAGAAAGC	ACGAAAGCAA	GCNAGCAAGC	AAGAAAGCAA	GCAAGAAAGA	AACAAAAGAA	240
AGAAAGAAAG	AAAGAAAGAA	AAAGAAAACA	GGAAAGCAAG	AAAGCACGAA	AGCAAGCAAG	300
CAAGCAAGAA	AGCAAGCATG	AAAGAAACGA	AAGAAAGAAA	GAAAGCAAGA	AAACGGGAAA	360
GACTCGAG						368

(2) INFORMATION FOR SEQ ID NO:1103:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 328 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1103:

GAATTCGGCC	TTCTGGCCTA	GAAACCCGTG	ACACACACAC	ACACACCTGC	ATAGATTTT	60
CCCAAGCACA	CGATATGCAC	GTGGATACAC	AGACTTACAA	GCACAGGGCC	ACGTGCAGAC	120
AGACACAGAC	CCTGTCTGCA	CCACAAACAT	ACCACACACA	GCCACACACA	CAGAAGCCAA	180
ACATCCTCGC	ATAGGTGGAT	ACAAGCACAG	ACTCACATAC	ACATATGCCA	TACACATATG	240
GATACATACA	CAGAGTACCC	CCACAAACAC	ACAGACACAC	ACGGGCAGAG	ACAGACAGAG	300
ACAGGCACAG	ACCCCCCCCC	ACCTCGAG				328

(2) INFORMATION FOR SEQ ID NO:1104:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 246 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1104:

GAAAAAACT	GAGTTAATGG	CCATGACTAG	ATGGGAGGTC	AGATTCGCCG	TTATATCCTC	60
TCTGTTTTGC	AGTTTAGACA	CAACTGACCA	GCATTGTTAA	AATGGAGATC	ATACGGCTGG	120
TAGAACAGAC	TCTTTGTGGC	CCAAAATTAG	CAAATTATAA	ATAGAATCTA	AAGCCATCCC	180
AGGCAAGGGT	TAAGTTATGC	ACCCCTACAC	TTAAAGAATA	AACATATGTTG	GCCGGGCCAA	240
CTCGAG						246

(2) INFORMATION FOR SEQ ID NO:1105:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 298 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1105:

GAATTCGGCC	TTTCATGGCCT	ACGATCAGAA	AGAAAACACA	GATCTCGAAG	TCGGGATCGA	60
AGAAGATCAA	AAAGCCGGGA	TCGAAAGTCA	TATAAGCACA	GGAGCAAAAG	TCGGGACAGA	120
GAACAAGATA	GAAAATCCAA	GGAGAAAGAA	AAGAGGGGAT	CTGATGATAA	AAAAAGTAGA	180
GAAAGAAGGC	GGAGCAGAAG	TAGAGATCGA	CGAAGAAGCA	GAAGCCATGA	TCGATCAGAA	240
AGAAAACACA	GATCTCGAAG	TCGGGATCGA	AGAAGATCAA	AAAGCCGGGA	AGCTCGAG	298

(2) INFORMATION FOR SEQ ID NO:1106:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 211 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1106:

GAATTCGGCC	AAAGAGGCCT	AGGGATGGAT	GGTTCAGCTG	CTAGAATTC	GATGCAGGAC	60
TTCTTCAAAA	TTGAGTGGAT	GATGCCTTGC	AGAGCCTGAA	AGCCGTCATT	CACGGGAAAC	120
ACATGATCCT	TACTGTCCGC	AATCCGGGCC	AGCTGTGTCT	CATTGAAATC	TTTCACACCA	180
ACACAGTAA	CAATTGCACC	AAGATCTCGA	G			211

(2) INFORMATION FOR SEQ ID NO:1107:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 269 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1107:

GAATTCGGCC AAAGAGGCCT ACCTGCTTGA ATTGGGGCCC CTTGTGAAGC TGCTGCCGCA	60
TCTCTTCCAT TCGCTGCTTC CGGTACTGCT GCAGAACTC TTCATCATCT TGGTCCTCAT	120
TCATTATGGC AAACCTCTTC AGAGTCATCT TCCCACTGAT CTTCTCCTGG AGGTCTTTCT	180
GTTTCTGTTG CTCCTCCTCT TCATCCAGAT GGGACCTGCA AGTCATTGAC AGCTTCTTGA	240
TCAGCCTTTC CATCTCCCGG CAACTCGAG	269

(2) INFORMATION FOR SEQ ID NO:1108:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 133 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1108:

GAATTCGGCC AAAGAGGCCT ATGAAAATTG ACTGCAATTA GTAAAGTTGG TATAACGTAC	60
GTTCCAGTT GTGCTATTTA GAATTATGAT AGTATTATGC TCCTACTTTT CTTTGATATT	120
GAGTAGTCTC GAG	133

(2) INFORMATION FOR SEQ ID NO:1109:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 123 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1109:

GAATTCGGCC AAAGAGGCCT AGCTTTTCT AATCATAAAT TATATGACCT TTACAGAAAA	60
TTTAGAAAAT ACAGAAAAAC TGAAAAGTTA CACATGGTAC AACTCACAAC CACAATCCTC	120
GAG	123

(2) INFORMATION FOR SEQ ID NO:1110:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 240 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1110:

GAATTCGGCC	AAAGAGGCCT	AGTGTTCCAG	ATCCTACGGC	TTATGAGGAT	TTTCCGAATT	60
CTAAAGCTTG	CCCGGCACTC	GGTAGGACTT	CGGTCTCTAG	GTGCCACACT	GAGACACAGC	120
TACCATGAAG	TTGGGCTTCT	GCTTCTCTTC	CTCTCTGTGG	GCATTTCAT	TTTCTCTGTG	180
CTTATCTACT	CCGTGGAGAA	AGATGACCAC	ACATCCAGCC	TCACCAGCAT	CCCCCTCGAG	240

(2) INFORMATION FOR SEQ ID NO:1111:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 264 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1111:

GAATTCGGCC	AAAGAGGCCT	AGGTGGGGAG	GGGAGGGGAC	AGGAGAAATG	AAATACCTTC	60
ACCGAGAACT	CAGCAGCTGC	CACCGCAGCT	GCCTCCTCAG	GATCCGGTCG	TCGGGGATAG	120
GGAAGGGAGG	GGAAAGGGGA	ACGGAAAACA	AAAAAAGGGG	GGAGGGAAGG	GGGAGGAAGG	180
AGTCGGGGAC	GGCCTCAAAC	TCAGCTCAGA	GGAGTCGCTG	CTGCAGCCGC	CACTCGGTAC	240
CCGCTGCTAG	GCCTCTTTGC	CGAG				264

(2) INFORMATION FOR SEQ ID NO:1112:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 519 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1112:

GAATTCGGCC	AAAGAGGCCT	AAATATTAGA	AAATGTATAT	TATAGAACAT	GATATATATT	60
TACATTCATC	TCTGTATTCT	CTCAGCTGTT	GTTAGAAGGA	CAGAATGTTA	AACTTTATCT	120
TAATTAGTAT	ACTAGAAAGG	GCAGTATAAT	ACTGTTTTAA	AGTGAAGGCA	TGACTGAAAC	180
TAAAATATTT	CATAAGGCTT	AGCTAGAGGC	AGAGTAACGT	GTTTTTGTTC	ATTGGGCTTC	240
CTTGTACTTA	GTTTTTTCAT	TTAATAATTC	AAACCAACAC	TTTTAAAAAA	ATAATTCAGA	300
TGAGACTGAG	CCATATCTGC	AGTAAGAGAA	ATATTTCTTA	ATGTTTTGGT	TACTTATGAT	360
AGAGTACTTT	TCTTGATACT	GTTAACTTTG	TGCTTTTTAA	AAAAAGTGAT	TCTCTAACAG	420
ACCTCTTAAA	TTGTGACATG	AAGGTATGTA	ATTAGATTTC	AGAAATTGGT	TTATTAGTGA	480
GGAAATTTTA	TCAATAAATG	TCATGGGGCG	GCGCTCGAG			519

(2) INFORMATION FOR SEQ ID NO:1113:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 562 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1113:

GGCCCCCTA GTTGGTATCC CAAATTCACA CATTCAAAAG CAAAGCCATT TCTCACCTTC	60
CTCCAAAATA CTTGTAATTC CTAATATCCT GACTCCAATC CATTCTTTAT TTTCTATTCC	120
CAAGGCCCTT CACAGAATCG AAACCTTTGT TATGAGCTCT TACATGGTGT ATCATCAATA	180
TGTTCACTAG ACAGGAGTTT TTTTAAAAA AAATCCTCAT CATTCTCTT CAATTCAAGA	240
GCTCTGATGG CTTCCAGTCT ATACAAGATA TATTAAGGCT CAACTTACAG TTCCAGTCTC	300
ACCTGCCCA CCTCCACCTT CCCAAACCTT CTGTATTCTA GCCAGAGCAT ACCTGCATTC	360
CCTTAGCTCA ACATGTGTCC TTGCTCACAC TGTCCCTTTG GTTGACCTAG CTTCAATTCC	420
TTCTCATGT GCAGTTATGT GTCTACTAAG CAGCAATGTG AAATGTCTTT ATTGTAGGTC	480
TGTCAAAGC TAAAGTCATG GCCCGGTGCA GTGGCTTGGG CCTGTAATCC CAGCACTTTG	540
GTAGGCCTCT TTGGCCGAAT TC	562

(2) INFORMATION FOR SEQ ID NO:1114:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 435 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1114:

GAATTCGGCC AAAGAGGCCT ATTATTGCTA TCGCCCTCCT TTCCCTTATT GCCTCCCAGG	60
CAAGCAGCTG GTCAGTCTTT GCTCAGTGTC CAGCTTCCAA AGCCTAGACA ACCTTTCTGT	120
AGCCTAAAAC GAATGGTCTT TGCTCCAGAT AACTCTCTT CTTGAGCTG TTGTGAGCTT	180
TGAAGTAGGT GGCTTGAGCT AGAGATAAAA CAGAATCTT TGGGTAGTCC CCTGTTGATT	240
ATCTTCAGCC CAGGCTTTTG CTAGATGGAA TGGAAAAGCA ACTTCATTG ACACAAAGCT	300
TCTAAAGCAG GTAAATTGTC GGGGGAGAGA GTTAGCATGT ATGAATGTAA GGATGAGGGA	360
AGCGAAGCAA GAGGAACCTC TCGCCATGAT CAGACATACA GCTGCCTACC TAATGAGGAC	420
TTCAAGCCCC CTCAG	435

(2) INFORMATION FOR SEQ ID NO:1115:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 477 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1115:

GAATTCGGCC AAAGAGGCCT AGTGCCTAGA TTGATCGGTA TAAGGCTCAC TCTCCGCCC	60
CCCAAAGTGG TTGATCGTTG GAACGAGAAA AGGGCCATGT TCGGAGTGTA TGACAAACATC	120
GGGATCCTGG GAAACTTTGA AAAGCACCCC AAAGAACTGA TCAGGGGGCC CATATGGCTT	180
CGAGGTTGGA AAGGGAATGA ATTGCAACGT TGTATCCGAA AGAGGAAAAT GGTGGAAGT	240
AGAATGTTTC CTGATGACCT GCACAACTT AATAAACGCA TCCGCTATCT CTACAAACAC	300
TTTAACCGAC ATGGGAAGTT TCGATAGAAG AGAAAGCTGA GAACTTCGGA AAAGGCTCAT	360
CTGTCAACCT GGAGAAGGGA AACTGTACTT TTCCCTGTGA GGAAACGGCT TTGTATTTTC	420
TCTGTAATAA AATGGGGCTT CTTTGAATT TGATAAGCCT AGGCCTCTTT GGCCGAA	477

(2) INFORMATION FOR SEQ ID NO:1116:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 620 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1116:

GAATTCGGCC	AAAGAGGCCT	AAGATGAAGC	CCAACATCAT	CTTTGTACTT	TCCCTGCTCC	60
TCATCTTGGA	GAAGCAAGCA	GCTGTGATGG	GACAAAAAGG	TGGATCAAAA	GGCCGATTAC	120
CAAGTGAATT	TTCCCAATTT	CCACACGGAC	AAAAGGGCCA	GCACTATTCT	GGACAAAAAG	180
GCAAGCAACA	AACTGAATCC	AAAGGCAGTT	TTTCTATTCA	ATACACATAT	CATGTAGATG	240
CCAATGATCA	TGACCAGTCC	CGAAAAAGTC	AGCAATATGA	TTTGAATGCC	CTACATAAGA	300
CGACAAAATC	ACAACGACAT	CTAGGTGGAA	GTCAACAACT	GCTCCATAAT	AAACAAGAAG	360
GCAGAGACCA	TGATAAATCA	AAAGGTCATT	TTACACAGGT	AGTTATACAC	CATAAAGGAG	420
GCAAAGCTCA	TCGTGGGACA	CAAAATCCTT	CTCAAGATCA	GGGGAATAGC	CCATCTGGAA	480
AGGGAATATC	CAGTCAATAT	TCAAACACAG	AAGAAAGGCT	GTGGGTTCAT	GGACTAAGTA	540
AAGAACAAC	TTCCGTCTCT	GGTGCACAAA	AAGGTAGAAA	ACAAGGCGGA	TCCCAAAGCA	600
GTTATGTTCT	CCAACTGAA					620

(2) INFORMATION FOR SEQ ID NO:1117:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 158 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1117:

GAATTCGGCC	AAAGAGGCCT	AGACCTGCCA	CATTTGTAA	CATTTTCCA	TTTCTAAAC	60
ATCCTTAAAG	AAAATCATAT	ATGGGGTCAC	ACCATCCTCA	CGGTAGTCCA	ATAGAGCAAC	120
CATGCCATCT	GGATTCATGT	TTTACCAAAA	CCCTCGAG			158

(2) INFORMATION FOR SEQ ID NO:1118:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 410 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1118:

GCACTGCTTC	TGTTAAAGTC	ACTGACCTTA	ACAGTTTAGA	ACTAGATAAA	GGAAATTTTG	60
TGGTTGACCA	AATGTGTGAA	ATAGGTAAGC	CAGAACCATT	GAATGAGGAG	GAAGCAAGGG	120
GTGTGGTTGA	GAATTATAAT	GATGAAGAAG	TGTCAATTAG	AGTTGGTGGA	AATACACAGC	180
CAAGTAAAGT	TTTGAACAAA	AAAAATGTAG	AAGCTATTGG	ACTTCTTGGA	GGACAAAAGA	240
GCAAAGCAGA	TTATGAGCTA	TACAACAAAG	CCTCTAATCC	TGATAAGGTT	GCTAGTACAG	300
CGTTTGCTGA	AAATAGAAAT	TCTGAGACTA	GTGATACTAC	TGGGACCCAT	GAATCTGATA	360
GAAACAAGGA	ATCCAGTGAC	CAAACAGGCA	TTAATATTAG	TGGACTCGAG		410

(2) INFORMATION FOR SEQ ID NO:1119:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 452 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1119:

GAATTCGGCC	TTCATGGCCT	AGTTGCCCTA	ATTTCAGACC	GAACTTGGAA	GCCACTGTAT	60
CCAATGGACC	TTTTCTGCAG	CTTTCTTCCC	AGTCTCTTAG	CCATAATGTT	TTTATGTCCA	120
CCAGTCCTGC	ACTTCATGGG	TTATCATGTA	CAGCAGCAAC	TCCGAAGATA	GCAAAATTGA	180
ATAGAAAACG	ATCCAGATCA	GAGAGTGACA	GTGAGAAAGT	TCAGCCACTT	CCAATTTCTA	240
CCATTATCCG	AGGCCCAACA	CTGGGGGCAT	CTGCTCCTGT	GACAGTGAAA	CGGGAGAGCA	300
AAATTTCTCT	TCAACCTATA	GCAACTGTTC	CCAATGGAGG	CACAACACCT	AAAATCAGCA	360
AAACTGTACT	TTTATCTACT	AAAAGCATGA	AAAAGAGTCA	TGAACATGGA	TCCAAGAAAT	420
CTCACTCTAA	AACCAAGCCA	GGTTATCTCG	AG			452

(2) INFORMATION FOR SEQ ID NO:1120:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 592 base pairs

(B) TYPE: nucleic acid

(C) STRANDEDNESS: double

(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1120:

GAATTCGGCC	TTCATGGCCT	ACATGAATCT	ACTTCTGATC	CTTACCTTTG	TTGCAGCTGC	60
TGTTGCTGCC	CCCTTTGATG	ATGATGACAA	GATCGTTGGG	GGCTACATCT	GTGAGGAGAA	120
TTCTGTCCCC	TACCAGGTGT	CCTTGAATTC	TGGCTACCAC	TTCTGCGGTG	GCTCCCTCAT	180
CAGCGAACAG	TGGGTGGTGT	CAGCAGGTCA	CTGCTACAAG	TCCCGCATCC	AGGTGAGACT	240
GGGAGAGCAC	AACATCGAAG	TCCTGGAGGG	GAATGAACAG	TTCATCAATG	CAGCCAAGAT	300
CATCCGCCAC	CCCAAATACA	ACAGCCGGAC	TCTGGACAAT	GACATCCTGC	TGATCAAGCT	360
CTCCTCACCT	GCCGTCATCA	ATTCCCGCGT	GTCCGCCATC	TCTCTGCCCA	CTGCCCCCTC	420
AGCTGCTGCG	ACCGAGTCCC	TCATCTCCGG	CTGGGGCAAC	ACTCTGAGTT	CTGGTGCCGA	480
CTACCCAGAC	GAGCTGCAGT	GCCTGGATGC	TCCTGTGCTG	AGCCAGGCTG	AGTGTAAGC	540
CTCCTACCCT	GGAAAGATTA	CCAACAACAT	GTTCTGTGTG	GGCTTCCTCG	AG	592

(2) INFORMATION FOR SEQ ID NO:1121:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 304 base pairs

(B) TYPE: nucleic acid

(C) STRANDEDNESS: double

(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1121:

GAATTCGGCT	TCATGGCCTA	AATAATTTT	ATTGAGAATA	ATAAATCACT	CTTTATCATA	60
GTATCTTCTC	TTCCCTCTTC	CCCTTAGT	TGGATAGCCT	AACTCTGAGA	AGTTAACCTT	120
TAAACAGTTT	TCTGGAAGAG	ACTGAATTT	TGGGTCCTTG	CAGCTGTGAT	GGTTTCAGAG	180
CTCAGACTGA	TCAGGCATCA	AGCTACCCTC	AAGAGTTTCT	GGCTGGATG	TTTCAGAACA	240
ACATCTACAC	CAGTAAAGTG	TAATAGGTCA	GTTTCAAAAC	GACCAAAGA	CCCCACCACT	300
CGAG						304

(2) INFORMATION FOR SEQ ID NO:1122:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 388 base pairs

(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1122:

GAATTCGGCC	TTCATGGCCT	AGTGAACTC	CATTTTTTTA	CTGCTATTAC	TCTGTGTTTT	60
CAGTTTTATG	ATTTGGAATA	CCATGATGGG	AACATCTATA	CTAAGCATTG	CTTGGGGCAT	120
AAAACAGGCT	GGATTTACTA	CTGGAATGTG	TGTCATCATA	CTGATGGGCC	TTTAACT	180
TTATTGCTGC	TACAGAGTAG	TGAAATCACG	GACTATGATG	TTTCGTTGG	ATACCACTAG	240
CTGGGAATAT	CCAGATGTCT	GCAGACATTA	TTTCGGCTCC	TTTGGGCAGT	GGTCGAGTCT	300
CCTTTTCTCC	TTGGTGTCTC	TCATTGGAGC	AATGATAGTT	TATTGGGTGC	TTATGTCAAA	360
TTTTCTTTT	AATACTGGTA	ACCTCGAG				388

(2) INFORMATION FOR SEQ ID NO:1123:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 478 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1123:

AGCAATTCCA	TAAACACATC	CTGGTGTCT	CACAGCCAAG	GTTTTTAGGT	TGCTATACCA	60
ATGGCTTATT	AAATGAAAAT	GGCACTAAAA	GTTTCTTGAG	ATTCTTTATA	CTCTCTGCCT	120
TCAGCAATCA	ATTCCATTCA	TACATCAGCA	CTCTGCTGGT	TCTGTTTGAA	ATATGTTCTG	180
TATTTAAAAC	TCAAATCTTG	TTGGATCTCT	GCAGGGCTTG	TGACCAATGA	AGTCATATTT	240
GTTGATGGTT	GACAAAGCTT	GCTTCACTCC	ATCAGAGAAT	GACTATCAAT	TTTTTTTTAA	300
CTGTCCTATC	ACGTCCTCTC	CTGTCAACCA	TTTTGAAGAG	TGGCAGAACT	TGAAGTCAA	360
CTTCCTCTGT	AAATATCCAA	GTATAAAGCC	CAGGAACCTC	TAGAATAACC	CAGATGCGCT	420
TTAATTTTTT	TTAATATGTT	TTGATCACAG	AACTCCTTAG	GCCTCTTTGG	CCGAATTC	478

(2) INFORMATION FOR SEQ ID NO:1124:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 450 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1124:

GAATTCGGCC	AAAGAGGCCT	AGGAATTCAG	TGCAAACT	ACTTTGAACT	GTGGTTCCTA	60
ATTTCCACGA	AAGTTTTTCT	CTGTTCTTCT	ATTATGGCAC	TTTCAGGGT	CTCCCTTGTA	120
CATTTTAGTT	TTTGTGTTT	TCAGTAAGTG	CCTTGAGATC	AGGGACCGGT	TCTACTGGTC	180
TGTTCCAACC	ATAGTTCCCT	AAACATTGTG	TTCCATTAAT	ATTGGGTGAA	TTGAAATGAA	240
TTTATAGGAA	GCTCCTTAAC	CTGGGGTCCCT	CAGACCTCTA	TGGGGTCCAT	GGACAGAATT	300
TGAAGTGGGA	AGGATATATG	AACTTGGATG	GAGGAAAATT	ACTTATTTGT	TTTTTACCAA	360
CCTCTCCTTT	GTAATTTAGC	CATTTGTTCA	ATTATAATGT	AGGCAATAA	AAATAAAAT	420
AAAAATAAAA	TAAAGGCAGC	TTAGGCCTCT				450

(2) INFORMATION FOR SEQ ID NO:1125:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 550 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1125:

```
GAATTCGGCC AAAGAGGCCT ATCCTTAGTG GATTCCGACT TCCATGGCCA CCGTCCTGCT    60
GTCTATATCA ACCAACACCT TTTCTGGGGT CTGATGAGCG TCGGCATCGG GCGCCTTAAC    120
CCGGCGTTTC GTTCATCCCG CAGCGCCAGT TCTGCTTACC AAAAGTGGCC CACTAGGCAC    180
TCGCATTCCA CGCCCGGCTC CACGCCAGCG AGCCGGGCTT CTTACCCATT TAAAGTTTGA    240
GAATAGGTTG AGATCGTTTC GGCCCCAAGA CCTCTAATCA TTCGCTTTAC CGGATAAAAC    300
TGGTGGGCGG GGGTGCCTCG GGTCTGCGAG AGCGCCAGCT ATCCTGAGGG AAACCTTCGGA    360
GGGAACCAGC TACTAGATGG TTCGATTAGT CTTTCGCCCC TATACCCAGG TCGGACGACC    420
GATTTCACG TCAGGACCGC TACGGACCTC CACCAGAGTT TCCTCTGGCT TCGCCCTGCC    480
CAGGCATAGT TCACCATCTT TCGGGTCCTA ACACGTGCGC TCGTGCTCCA CCTCCCCGGC    540
GCGGCGGGCG
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(2) INFORMATION FOR SEQ ID NO:1126:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 381 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1126:

```
GAATTCGGCC AAAGAGGCCT AGTTTGCAGG AAGAAGGCAT GGGATAGTCT GAGAACAAC    60
AGGCACTAAA TGGAGCAACA TCATCTTGAG GTGTCAAGCA GGAGCTGGGA GACCAGCAGA    120
GACTCCCAAG GCCTTGCTGC TGTTGGTCTG CAGGCAGCTC TGTAGGGCAG GCTGTTGTCA    180
TTTTGCAAGT GAGCAAGCAG AAGCCCAGGC AGGTGAGTCA TTCACTCCAC AGTTCATAAC    240
TTGGATTGTG GGTAGTTAC ACCTGACTCC AAAACTTGAC TTTTACTAC TCAGCTATAC    300
TGGCCTCTCA AGAAAGGCTA GGCCCTAATT TCTAGACTCT CTTTACCAA TAATACCTGT    360
TGCCACGAAG TAGGCCTCTT T
```

(2) INFORMATION FOR SEQ ID NO:1127:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 361 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1127:

```
GAATTCGGCC AAAGAGGCCT ACTCTCAAGG TGGGCATATG CAAAACATAA TCTCTAAATT    60
CTTCAATACT AAGAAATACC TTTGTTTTAC CCCTAAATC AAATGCCATT TTGGCTGGAT    120
ATAGGATTCT AGGATTAAAG CCTTTTCCA GCAGAACTTT GAAGACATTG CTCCATTTAC    180
TTCTAGCATC CAGTGTGTCC AGTGATAAGT CTGCTGTCAA CCGATTCTT GTTCCTTGGT    240
AGGTAATTTT TCTTCTCTCT CTAGAAGCCC TTATTATTTT CTCTTTATCA CTAGAATTCC    300
AAAATTTTAC CAAGATGTGT CTAGGAGTCA GTCTCTTTT ATCAATTTTA CTAGGTACTC    360
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361

(2) INFORMATION FOR SEQ ID NO:1128:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 359 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1128:

GCAGCCAATG	GCGGCGCCAG	AGGGGAAACN	GAGCCTTGCT	NACGGGCCCCA	ACGCTGGGGA	60
GCAGCCAGGC	CAGGTGGCGG	GCGCAGACTT	CGAGAGCGAG	GACGAGGGCG	AGGAATTTGA	120
TGACTGGGAG	GACGACTACG	ACTATCCCGA	AGAGGAGCAG	CTCAGTGGTG	CCGGCTACAG	180
AGTATCAGCC	GCTCTTGAAG	AAGCCGACAA	GATGTTTCTG	AGAACAAGAG	AACCAGCCCT	240
GGATGGCGGG	TTTCAGATGC	ATTATGAGAA	GACCCCGTTT	GATCAGTTAG	CTTTTATCGA	300
AGAGCTTTTT	TCAGTATGG	TTGTCAATCG	TCTGACCGAA	GAACCCGGCT	GCTCTCGAG	359

(2) INFORMATION FOR SEQ ID NO:1129:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 274 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1129:

GATGGCACCC	TCCTCAGAAA	GCAGCGTCCC	CTCTCACAGT	ATGTCCTCCC	GACGGGACAC	60
AGACTCGGAT	ACCCAGGATG	CCAATGACTC	AAGCTGTAAG	TCATCTGAGA	GGAGCCTCCC	120
GGACTGTACC	CCTCACCCCA	ACTCCATCAG	CATCGATGCC	GGTCCCCGGC	AGGCCCCCAA	180
GATTGCCCAG	ATCAAGCGCA	ACCTCTCCTA	TGGAGACAAC	AGCGACCCTG	CCCTAGAGGC	240
GTCTCGCTG	CCCCCACC	CG				274

(2) INFORMATION FOR SEQ ID NO:1130:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 325 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1130:

GGCTTTCCAC	CTTCCCTGCG	GAGATGAGGG	TGGTGGCCTC	CCTTTTGTG	ACCCCTTCCAA	60
GGGTATGCT	CGTCTGCTGG	CTTTTCTCCA	AGATGCTGCC	AAAAATGATC	TTAA1AAGAC	120
ACAAGCCTGG	TTGTGATATT	TTCCTGATTC	AAGTGTCTCT	GTGGTTCTTG	GTTGCCTTCA	180
GGAGAGAGTT	CAAGCCTCTT	ATGGTGGTTT	GTGAGGCCAG	GCCTGAACCTA	GCCCCATCGT	240
CTGTTTATTC	ACCACCCAG	TATCCCTGCT	GCAGGTTTTT	AAAGATCTCA	TGTCCCTGAT	300
TGCTGTGAC	TGTGTCTGAC	TCGAG				325

(2) INFORMATION FOR SEQ ID NO:1131:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 639 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1131:

CTCGAGGATC	CCCGGGGACG	GGACGGGCCG	GGGCTTGGAG	GGGGGTTCGGC	TGCCACAGGC	60
TCACATCACG	GCCTCCATAT	GCAGGATCCT	CAGGGCCTCG	GAGATCTGCG	CGCTGGGGTC	120
CATCTGGCCG	TACATGCCCA	CCAGGAAGGC	CCGGTGGAGC	AGCACAGCCG	CGTGCTCTTG	180
GCACAGGAGA	GCGTACTCAG	GCAGGTTCCG	GAGGGCCGTC	TGCACCACCT	CAAAGTCCTG	240
GCTGCCCAGG	CAGTACATGA	ACGTNGGGCA	GGAAAGCGGC	TGCAATGCNG	GGGGCTGTCT	300
GCATGGAGCG	CAGGGCCAGG	CTGAAGGCGA	GGTTGCGGCA	ACACTCCTCG	GCCGAGCTCA	360
TCAGCCGCTG	CAGGTTGGTC	GAGAAGAAGC	TCAGGATCTC	GGGTCTCCGC	CGGGACATCT	420
CGTCTATGTC	ACTCAGAACC	TCCAGCAGAT	CCTCCACCGT	TTGGCCCCGG	GAAAGCCGTT	480
TCATGTAGGG	GGCCATCTCG	GCCGCGGTCA	GAGGGGTGAA	CAGGGAGACG	CTGACCAGGG	540
GCAAGGAGCC	GGCTGAGCTC	TCCTCTCGC	CCTCTTCGTC	CAGGCCTCGG	TCGGTCCTGT	600
CGTCCCTGCT	GGGCAGGCTG	AGCCCTGCAA	GGAGGGATC			639

(2) INFORMATION FOR SEQ ID NO:1132:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 448 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1132:

GGTCTGTGGT	CTTGGAGGCT	TAAATTGTAA	AATACATCCC	TTATGGAATC	CTAAATTCCT	60
CTAGGTGTTT	TTGGAAGGCG	CATTGAGGCC	TTGTGAGCTA	AAATGGAATG	GATTTAATAT	120
TTCTATCTG	GCAATTTCCAT	CTTGCCCTG	GTACACAAGT	CCTGGCCTG	GAATCAGCC	180
TTGATTCACT	GTCCGTCTTC	ACGGATTAGC	TGTGCTGTTA	TGTTGTCTGT	GCTGCAGATT	240
GGCCCATGTG	GGAAGTCGGG	GGGGACCTGA	TTTCCTGCTT	GGAAGACTTG	GGGGACTGCC	300
GAGCATATCA	AAGTGTTTAT	AGTCACCAAG	TGAAGTGCAG	CACAACCATC	TCCTCTCCAG	360
CAAGCCCTGA	AGTCAGTAGT	GCCTGCAGGT	GAAACCAACC	AGCCCTGTGT	TAGAGGAGGA	420
AAAGCGGAGA	TGACGTGGAA	GTCTCGAG				448

(2) INFORMATION FOR SEQ ID NO:1133:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 372 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1133:

GAATTCGGCC	TTCATGGCCT	AGGGCTATGG	CCGGAGCTTG	AGATACGCCG	CTCTGAATCT	60
TGCCGCCCTG	CACTGCCGCT	TCGGTCACTA	TCAACAGGCA	GAGCTCGCCC	TGCAGGAGGC	120
AATTAGGATT	GCCCAGGAGT	CCAACGATCA	CGTGTGTCTC	CAGCACTGTT	TGAGCTGGCT	180
TTATGTGCTG	GGGCAGAAGA	GATCCGATAG	CTATGTTCTG	CTGGAGCATT	CTGTGAAGAA	240

GGCAGTACAT TTTGGGTTAC CGAGAGCTTT TGCTGGGAAG ACGGCAAACA AGCTGATGGA	300
TGCCCTAAAG GACTCCGACC TCCTGCACTG GAAACACAGC CTGTCAGAGC TCATCGATAT	360
CAACATCTCG AG	372

(2) INFORMATION FOR SEQ ID NO:1134:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 452 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1134:

GAATTCGGCC TTCATGGCCT AGCTGGTTCT TTTATTTTGG TGTCTCAGGG ATGTAAAAGA	60
TTTTTAGTGC ATAATATTAA ATGGCAAAT CAAATTTCCC AACAAATATAC AAAATAAAAT	120
CCCATTTACA AAGGGAAAAG GCTTTATCTA TTTGTATATC TTCTTATATG TATATAAATT	180
CATAGAAAAC TATCTGGAAG TGTATGTAGC AAAGCATTAA CAATGGTTAT CTCTGGGTAT	240
AAGAAGGAAC TAGAACTGAA GAAGATGGTG GTGATAAGGG AAGGTATACC TTTCTTTTTT	300
TTTTATTCTG CTGTGCTTGA GTTTTAAAGA ATGAGAATAT TCATGTATTC CTTGTATAAT	360
TATAACACAG AAAACCTCCT TATTAGGAAT AGGAGGCTGA TTTCTTTTTT AATGACTGAT	420
CTTAGGTCCT TTTTGGGTAT TTCTCCCTCG AG	452

(2) INFORMATION FOR SEQ ID NO:1135:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 283 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1135:

GAATTCGGCC TTCATGGCCT AGGAGGAGGG AAGGATTGGG AGCAGTGGGG TGTGAGTGGG	60
AGAGGAGGTA GGGAAACCAGA TGGGGAGAAT CGAGCCAAGT TCTGGGTGG AGGAAACTTT	120
CTTATTTAAC TGAGCTGGTG GGTACATAT CTAATGTTGC AGGTGATGAA TACAGGCTGG	180
GGTAGCCGTC TAAATCCACC GAAAGAAGTA AATGAAAGTG GTTCTTGTGA GGTGAAAGG	240
TCAAGGTAAA TGGCTGGTTT TTAGGAAACA ACTGATCCTC GAG	283

(2) INFORMATION FOR SEQ ID NO:1136:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 264 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1136:

GAATTCGGCC TTCATGGCCT ACTGGAGACT TGTAATTAGT CTAAGCATAA TATGATTAGG	60
TGGATGAAAT ATTTTGGAGT TTGGTTTGT TTTAAATGTA AATACTCATG AAAAGTAAAA	120
CATACTGCAC TGTGTCCCTG GGAATATTTT TGTTATCTTT AAAATACTCA GTATTATAGG	180
CATTTATTAA CACAGCCTTA CATTTGCCCG GTTTGACCTG GAGGCCGAAA TGAATTGTGA	240

CTTATGTCCC AGCTGGGTCT CGAG

264

(2) INFORMATION FOR SEQ ID NO:1137:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 653 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1137:

GAATTCGGCC	TTCATGGCCT	ACCACGTTTC	CTCACCTGTA	AAATGGACAC	TGCAGCTATG	60
TCTGCTGTTT	CACATTGTTG	ATAGAACTGG	ATGCTGTGGT	GACATTTGGG	ACACTATCAT	120
GGTGCTGGG	GTGGGTGGG	GCCCAGGCCT	GTGGGCTTCT	GTCTTTCATC	AAAGAACTTC	180
AGATCCCAGA	AAATTAAGAT	TCTCAAAACA	TAACTGTCGG	AAAGGGCTTT	TGAATCCACC	240
TTGGTGGCCT	CTTCCTGCCT	CCAGGGCTCA	TGAGATAGGC	TGACTTCATA	TGAAAGTTTT	300
GAGGATGAGG	AAGTCTCTCT	CCTCTTCAGA	TACTGACCCT	CTCTCTCCTT	ATTTCCTTGG	360
TGCCCAGAAT	AGGGCTTTGG	TTATCTTGAA	TGAATGAATA	TAAACTCACA	GGTGTGATCT	420
GAGCCACCTA	AAGCCCTCTT	TGGTTCCTGC	TCAGCTTGAG	GGCATCACCT	AAAGGCCACT	480
GGCTGCATTT	TCCAGGAGGT	GTTTTCTAAG	CTGTATCTAT	ATAGGAATGG	GGAGGAAAGC	540
TAAGTCATTG	TAGACTGAGA	GAAAGGGAAT	AAGAGTCTGT	TCCAGACCAG	CTAGGGCTGA	600
CAAGCTTAGG	CAGCTGGGGG	CAGAGGGCAC	TGAGAATGAG	GCCCTAGCTC	GAG	653

(2) INFORMATION FOR SEQ ID NO:1138:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 315 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1138:

GAATTCGGCC	TTCATGGCCT	ACAAAAGGTT	CTTGATGACC	ACCACAATCC	TCGCTTAATC	60
AAAGATCTTC	TGCAAGACCT	AAGCTCTACC	CTCTGCATTC	TTATTAGAGG	AGTAGGGAAG	120
TCTGTATTAG	TGGGAAACAT	CAATATTTGG	ATTGCGCGAT	TAGAACTAT	TCTCGCCTGG	180
CAACAACAGC	TACAGGATCT	TCAGATGACT	AAGCAAGTGA	ACAATGGCCT	CACCCTCAGT	240
GACCTTCCTC	TGCACATGCT	GAACAACATC	CTATACCGGT	TCTCAGACGG	ATGGGACATC	300
ATCACCATTG	TCGAG					315

(2) INFORMATION FOR SEQ ID NO:1139:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 304 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1139:

GAATTCGGCC	AAAGAGGCCT	AGTTAATACT	TATTTTATTT	TCTGTTTTTA	TCATCTAGTC	60
AACTCGCAA	CTTCCAGCAT	TTGTCTAAAT	CTACTCAATA	TATTCCAGTA	CATCAGATAA	120

TATATCAGTT TCATCCTCCT GAAAACTCT TTTCCAGTGT ATCCTGACCT GCTCTAATTT	180
TGACTTGATG CTTTCTGTAT CTGGTGCACA GCTGTTACCT TGAATCTTC CCTTCATCAT	240
TATTCAGAGT GTTTCTGTAG TTTTCTCTT GCATTGGATT TTGTGCTTCC TGAATCCTCT	300
CGAG	304

(2) INFORMATION FOR SEQ ID NO:1140:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 303 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1140:

GAATTCGGCC AAAGAGGCCT AGGGTTTTGT TTGGTTTGGT TTTAGTTTTT TGTGGGAGAA	60
TTAAGATTTT TTAAGAGATA TTTTCAGATT TTTCTGTGT CAGTTTTGGT AATTTGTGTC	120
TTTTAGGAAA ATTTCAATTC ATCCAAGTTG TTGGATTAT TGGCATAAAA TTTTTCAGAA	180
TATTCCTTTA ATATCCTTCT AATGTCTGTA GAATCTAATC TGTATTGCAG TCTCTTCATA	240
TTGTAATTT GTGTTTTTTC TATTTTTC TGGATCAGTC AGTCTAGCTG GGGAGAACTC	300
GAG	303

(2) INFORMATION FOR SEQ ID NO:1141:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 330 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1141:

GAATTCGGCC AAAGAGGCCT AGTAGCTTAG TTATTGTTTA CTTTGAAGCC CTTTGCCTC	60
TACTCTCTCC CATATATCTT CTCCTGACAG GGTGAAGTCA CCTATAGCAT TTCCTAGTGT	120
ATGGAAGTAT TAATTCTTT CTTTACTGGA AGAGCTACTA GCTTTTCTTC ATACAGTTTC	180
CTCTGCTCCA GTTTCATAAG TTTCTTTTGT GCTTGTATCT GTTTAGGATC AGGTGATATG	240
GCTTCATTTT TCATGACTGA AGCCCGGCAA CATAACACTG AAATTCGAAT GGCAGTCAGC	300
AAAGTGGCTG ATAAAACGGA TCATCTCGAG	330

(2) INFORMATION FOR SEQ ID NO:1142:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 294 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1142:

GAATTCGGCC AAAGAGGCCT AGAGGGGAGC CTGGCCTCTG GCATATTCAT CAAGTATGAG	60
TTCTGGGGAT GAGTCACTGT AATGATGTGA GCAGGGAGCC TTCCTCCTG GGCCACCTGC	120
AGAGAGCTTT CCCACCAACT TTGTACCTTG ATTGCCTTAC AAAGTTATTT GTTTACAAAC	180
AGCGACCATA TAAAAGCCTC CTGCCCCAAA GCTTGTGGGC ACATGGGCAC ATACAGACTC	240

ACATACAGAC ACACACATAT ATGTACAGAC ATGTACTCTC ACACTCCAGT CGAG

294

(2) INFORMATION FOR SEQ ID NO:1143:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 331 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1143:

GAATTCGGCC AAAGAGGCCT AGTTTTAGTT CAGAATAACA TTAATTTTGA GAGATTGAGG	60
TAAAGAACCT TAACTAATGC TAAGGAGTTT ATTTTGATTA ACATAGGTTA TTCTGACCAC	120
CACCTCTTCC TTCCTTAATC TCCTTAGAAT CTGACAGTCT CAAAGCTGTC ACACAAATTA	180
GACTAATTTT GACACTTTGA AATGAAAAC TCAAGGAAGA AGTAGCCACG GACAGTTATG	240
TTTATAATCA GTAGGTGGCA CTCTTTCCTC AGGTAGCCCC CCATTTTCAC ATGATGTGTT	300
TGAAGGTAA ATGCCACCA AAGTGCTCGA G	331

(2) INFORMATION FOR SEQ ID NO:1144:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 508 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1144:

GAATTCGGCC AAAGAGGCCT ACTTCAGCAT GACTACTCAG TTGCCAGCTT ACGTGGCAAT	60
TTTGCTTTTC TATGTCTCAA GAGCCAGCTG CCAGGACACT TTCCTGTCAG CTGTTTATGA	120
GCATGCAGCG ATATTGCCCA ATGCCACCCT AACACCACTG TCTCGTGAGG AGGCTTTGGC	180
ATTAATGAAT CGGAATCTGG ACATTTTGGGA AGGAGCGATC ACATCAGCAG CAGATCAGGG	240
TGCGCATATT ATTGTGACTC CAGAAGATGC TATTTATGGC TGGAACCTCA ACAGGGACTC	300
TCTTACCCA TATTTGGAGG ACATCCCAGA CCCTGAAGTA AACTGGATCC CCTGTAATAA	360
TCGTAACAGA TTGGCCAGA CCCCAGTACA AGAAAGACTC AGCTGCCTGG CCAAGAACAA	420
CTCTATCTAT GTTGTGGCAA ATATTGGGGA CAAGAAGCCA TGCGATACCA GTGATCCTCA	480
GTGTCCCCCT GATGGCCGTT CGCTCGAG	508

(2) INFORMATION FOR SEQ ID NO:1145:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 461 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1145:

GAATTCGGCC AAAGAGGCCT AAATTGCTGG CGGATTTAGA CCGGTAGAAA ACCCGGGATG	60
GTTTATTTTG ATTGAGCCCC CTCTGGGTGG CAGAGAGGAG GCTTGGGCTC TGGGCCCTTT	120
ACGTTTGGAG AAATGGCTTT ATCAGCTCAG TTGAAAGGTT TTCCCTCTA GCTAGTGAAA	180
GATAAACTTG GAAATGCAGG TTTCTCCAGC GGTGTGGTGG GGGGACAGGG GTCGCCTAGG	240

GAAC TTGCAG	GGGCCGCGGC	CTCTGTTGTG	CTCTTCTGGA	GAGTGCACTG	TTTGTGGAAC	300
TTTTCTAGAG	TGGCAAAAAC	GATCTCCACT	GTCGGTGAAA	GGGCAGTTCC	TGAAGTCAGC	360
TCATGGTCCT	GGCTCCCTT	CTCCCCAGCA	GTGAACTGGG	GGTGA CTTC	TGATCTGCCC	420
AGCACAGGAG	AGCCCCGCAA	AGCGCCTGGG	AGGCCCTCGA	G		461

(2) INFORMATION FOR SEQ ID NO:1146:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 291 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1146:

GAATTCGGCC	TTCATGGCCT	ACCATTTTGG	ATTGATTTTT	GTGTATAGTG	TAAGATGAAC	60
CCAATTTTCT	TCTTTAGCAT	GTGGGAATTC	TGTTTTTCTG	TCACCCTTTT	TTTTTGAGAT	120
GGGGTCTCAC	TATGTTGCCC	AGGTTGGCCA	TGAACTCCTG	AGGTCATGTG	ATCCTCCTTC	180
CTCAGCCTCC	TGAGTAGCTA	GGACTACAGG	CATGTGCCAC	TGTGCCTGGC	TCCAGCAACA	240
GTTGTTGAAG	AGACTGTTCT	TTATTTACTT	ATTGTATCCT	CTGTGCTCGA	G	291

(2) INFORMATION FOR SEQ ID NO:1147:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 338 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1147:

GAATTCGGCC	TTCATGGCCT	ACCCACCTGC	CCACGCCGAC	TTGGGAGGAT	GGTGGCCTGC	60
AGCGGCCAAG	AAGCCAAAAA	AAAAAATTTT	TTTTTTTTTCA	GATACTGTGC	TTGATTTTTG	120
GAGAGGGGAG	AGGTGGAAAT	TCCTAAATGG	CTAATGCACT	GTTCCTTCCA	GCCCGAATGC	180
CTCTGCCCAA	ACCCCTTTTC	CCTGCTGCCT	CTGTCCCCGC	ATCCTTGTTT	TCCCTGGGT	240
CCGAAACATT	TTTTCCGAGG	ATGAACAGGG	GACATCTTTA	GGTTTCTCAA	CTCTTGCTTT	300
GGTGTGTTGCC	GCAGCATGGA	AAACAGGCAC	CCCTCGAG			338

(2) INFORMATION FOR SEQ ID NO:1148:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 385 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1148:

GCAGGAATCA	GATTCACTCA	TTAGTAAGCC	GCACTCGCTG	AAGGGGAGAG	CATGAGCAAG	60
GCAGACGTGA	GCCACTGCGC	CCGGCCTGAA	GAGTTTTTGC	TAATTGGATA	TTAGGGAAAA	120
CCACAGGATG	GATTAAAGACA	AGAGAGGGAA	GGTAAGGTTC	TAGACAGCAG	GATTATGTCT	180
GTTAGTTGGT	TTTATGTCAC	TTTTCTAGCC	AAGCTGTACC	ATCCTGTTTT	TGTTGGTTGG	240
TGAATGCTTC	CAGCTCTTTT	CCTCCAGCCC	TTGGAAGAGG	TGGTCCTATA	ATTGTTAAGC	300

ATCTAGCTAG GGTGATGAGT AGGAATAGCA ATAAGTGACA GGGAAGTTGA AGGCTGCAGG 360
GCTCTTTGCA GCGGCTTAC TCGAG 385

(2) INFORMATION FOR SEQ ID NO:1149:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 303 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1149:

GAATTCGGCC TTCATGGCCT AGTCACATGA ATGAGAGAAT TCTAAATGCA AGAAATGTGC 60
 AAAGGCACAG AAACACAGAA GAGCATGTTG TACAACCTGG CTATAGTTTA GATTTTGTGT 120
 GTGTGCTATG AGAGTGTGCG TGTGCTGTGA GTGTGTGTGT GGGCGCACGC ACGCATTGTG 180
 AGGAGGTAGG GAGAAGAGTG CCGGCATAAC ATGAAATGAT ATTGGACCTC AAATGGTATG 240
 CTAAGATGTT TGACAATTTT ATTCTAAGCA GTGAGTTTTT AAATTTAGAC ATGCAATCTC 300
 GAG 303

(2) INFORMATION FOR SEQ ID NO:1150:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 419 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1150:

GAATTCGGCC AAAGAGGCCT AATTGAATTG TATTGGTCTT TTTCTCTTTA ATATTTTAGG 60
 TGCTTTATTA TATATTAGGA TTATTAGTCC TTAGTTTGTG AAATAAGCTG CAAATATTTT 120
 TTCCCAATT TTTCTTTTGT CTCCTTGCTT TATTCTGGT GTTTATTTT CCACAGGTGT 180
 ACTGTTTTCT ATAGCCAAAT TATTGATCTT TTCTTTAATT GCTTTTTTGT TCACTCAAAG 240
 GAAGGTTTTT ACCACTGAGA GGTATAAAA TAATCACTC ATATTTTAC TCTTTTTTTT 300
 TGCTTATGTT AATTTTTTGT TTGGAACAAT CTCAAATTCA CAGAAGTGT GTGAGTACGT 360
 TGCAATAAAC TTGTTTTTTC CTTATGCATT TCAGAGTAAG TTACCAGTCC GCGCTCGAG 419

(2) INFORMATION FOR SEQ ID NO:1151:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 394 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1151:

GAATTCGGCC AAAGAGGCCT AGCGGATGGA GTCTTTGACA GTGTTTTTGA TCTCCTGCAG 60
 ACGGCTGCTC AGGAAGCTGT TGACCCGATC CAGTTCCGG TCGGGCCACT CCAAGAGCCT 120
 CTCCCTGGCA GGCCTTGCT CCCGGCTTCC AGAAACACGA TTTGCCTGCT TTAGAGCTTC 180
 TGCTGCCAAC TGGGCCTTCT CTTTTCCTT CTTTTCAGC TTGTGCCGGG CCCGCTTGGC 240
 GGCCCTGGCG CTGTTGGGGA CTTTGGGCTC CGTGCTGTTG ATGAATTCCA GCAGCTCATC 300

CACATCTCGG TGGTCCACGG CGGGCTCCCC AGGGATCCCC CCCAGGGTGC CCCCTTCAT 360
GGGCAGCTCC TCTTTCGCC TGGTCAGCCT CGAG 394

(2) INFORMATION FOR SEQ ID NO:1152:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 426 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1152:

GAATTCGGCC AAAGAGCCTA CTGTGAATCA CGAACTGGCT GAGGGCGGCT GACCGCTTGT 60
AGCTGTTCCG GCCATGCACC ATAAGAACCG GCCAAGATGC TTAAATTGAG TGATGGAGAA 120
GTCTGCAGCC AACGAAGCCT GTTTTCCTTC CTTTCCTTCC ACTCCACGC CGCAGTCAGA 180
TTCCTGAATC ATGCTGACGT CATTGCCTCC GTCCCCTACT GCACAGGTGA GCTTGCCCGT 240
GCGCTCCTGA AGCAGCGCCA CGATCTGGGC CTTCTGGGTG GGGGCACATC NGCAGCAGAC 300
TACGGCCGGG CACTGGCAGG CCAGCTCCAT GAACTCGTAC TCATAGTACT TGAGGCAAAC 360
CTCCAGGGAG TCTCCCGAGA TGACCAGGGC ACAATCATGC TTCCTGCGGA AGGCGTTCAG 420
CTCGAG 426

(2) INFORMATION FOR SEQ ID NO:1153:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 270 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1153:

GAATTCGGCC AAAGAGGCCT AAGCTGATAT TTATTGGACA TTTGCACCAT GCCAAGCATT 60
CGGCTTGGAT TATCCCATTT GTTCTCACA GCCGGTATTT ATTGTCTGCT CCTCTGTGCC 120
AGGTGCTGTG CTCTGGGCAG GGGCACTGCA TGGGCTGCCT GCCCTGGTGG AGCTTGTGGT 180
CTGATGGGTG AGGCTGACCC AAGCCACCC CATTGCCAAC AGGGCCAGGG CAAGAGTACA 240
CACAGGGGCC TCATACCATA TGTCCTCGAG 270

(2) INFORMATION FOR SEQ ID NO:1154:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 582 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1154:

GAATTCGGCC AAAGAGGCCT AGCTGAAATC ATTCTGAAAA CTCAAACAGT AGACTTCAGC 60
ACACAAGGAA AGCCAAAGCC ATTTGAGGGG GAATAAAGCC AAAAGCCTTT CACCTTATTC 120
GTTCCAAGAA TCTCACCGCC CCCTCCTTAT CCCCCTCCAA AAATAAGCCA TTGCACACAG 180
ACAGGCAGCA TGGCTAGCAA ACGAAAATCT ACAACTCCAT GCATGGTTCT GACATCACAA 240
GTAGTAGAAC AAGATGTGCC CGAGGAAGTA GACAGGGCCA AAGAGAAAGG AATCGGCACA 300

CCACAGCCTG ACGTGGCCAA GGACAGTTGG GCAGCAGAAC TTGAAAACTC TTCCAAAGAA 360
 AACGAAGTGA TAGAGGTGAA ATCTATGGGG GAAAGCCAGT CCAAAAAACT CCAAGGTGGT 420
 TATGAGTGCA AATACTGCCC CTACTCCACG CAAAACCTGA ACGAGTTCAC GGAGCATGTC 480
 GACATGCAGC ATCCCAACGT GATTCTCAAC CCCCTCTACG TGTGTGCAGA ATGTAATTC 540
 ACAACCAAAA AGTACGACTC CCTATCCGAC CACAGACTCG AG 582

(2) INFORMATION FOR SEQ ID NO:1155:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 279 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1155:

GAATTCGGCC TTCATGGCCT AGGATCCGTG AGGGAGACCG CATCATCCAG ATTAACGGTG 60
 TAGACGTCCA GAACCGGGAA GAGGCGGTGG CCATCCTGAG CCAGGAAGAG AACACCAACA 120
 TCTCCCTGCT GGTGGCCCGA CCTGAGAGTC AGCTGGCGAA AAGGTGGAAG GACAGCGACC 180
 GGGATGACTT CCTGGATGAC TTTGGCTCTG AGAATGAGGG GGAGCTGCGT GCTCGTAAAC 240
 TGAAATCACC CCCTGCCCAG CAGCCCGGAA ACACTCGAG 279

(2) INFORMATION FOR SEQ ID NO:1156:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 353 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1156:

GAATTCGGCC AAAGAGGCCT ACATTGTTAA TATAATTTAA CAGAAGTTGT GAAACTAAAA 60
 TTTTCTAAGA TTAACGGTA GTTCATTGTA AATGAACATA ATGAACAGAA TTTATGACTC 120
 CACTGTGGAA AATGCTATCA AATAACTAAG GAATATATAT GGAATAAGTG TACATATGTA 180
 AAATATTGTT ACTAGAGTTA GATATGTGCC AAAGTCCATT TATCCCAAAT CCTGTCTGAA 240
 AAGGAGGGGT ACATTGGTAA ACATTTTGA GTGCTTAAAA ATGCCAAAAA CAAATGTA 300
 ATTTCTACTT TGATAAGTA AAAAAGTTAA ATGTGTGTAA AAAAGTGCTC GAG 353

(2) INFORMATION FOR SEQ ID NO:1157:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 331 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1157:

GAATTCGGCC TTCATGGCCT ACGGTGGCCT TTGGGGCCGA AGTGGGCGTG CGGCTCGCGC 60
 TGTTTCGGCG CTTCTGCTG ACGGAGCTGC TCCCCCGTT CCAGAGACTC ATCCAGCCGG 120
 AGGAGATGTG GCTCTACCGG AACCCCTACG TGGAGGCGGA GTATTTCCCC ACCAAGCCGA 180
 TGTTTGTGCG TGGAGAAAGA TCGTCTTTCC TCCCTCCCCA TGACCGGGCT TCCCGCGGGC 240

ACCTGTGCGT TTTCCACCCC GAGACGGCCT TTGTAGGGAC CCACTGCCCA CTCCGCTGCT 300
GTGCGCTGGG TTCCGCCTCC TAGGGCTCGA G 331

(2) INFORMATION FOR SEQ ID NO:1158:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 178 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1158:

GAATTCGGCC TTCATGGCCT AAAAAGCTTAG ACTGACATCT AGCTTTGACA ATCATAGTAT 60
GTTTTATTTT CCTGAGGGGG AATAACTTAT AATGCTGTTT AGTTTGTAC TATTGGTGTG 120
TTGGTGAATT TTAAACTGT GTGCTAACTG CACGATTGAA TTCTAGACCT GCCTCGAG 178

(2) INFORMATION FOR SEQ ID NO:1159:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 401 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1159:

GAATTCGGCC TTCATGGCCT AAGCACTTTG GGATGTTGAA GTGAGGGGAT TGCTTGAGCC 60
CTGGAGTTCA AGACCAGGCT GGGCAATATC GCCAGACCCC ATCTCTTAAA AAAAGTAGTT 120
CTTTACTGTT GCCTCTATTG ACTCTTGAAT GCAAGAAAGA ACATTTGCC TTTGACTTCT 180
AATATTATCT TATATTCTCT CTTCTTCAAA AGATCAGAAG CACATGCTGT AAACATCAAT 240
CATGATCATC TTTGTCTCCC TTATCAGATT GTCAAAATTA TATCTTTTCC TATTTTCCTG 300
CATACCTTAT CTTTTCCTA AATTCTCAGT TCTCCAAGTT CTCAGAAATC ATAACCTTCAG 360
ACCTTGAAAT GATGACTCTG TTCCACCCCC ATCGTCTCGA G 401

(2) INFORMATION FOR SEQ ID NO:1160:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 350 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1160:

GGGGGGCCAG ACACGCNTGG GGTAAGAAGG GCCTGGTGGG AGGAGTTCAC AGAGCAGACG 60
GTGCACTGGG ACCAGGAGAG CAGAACACAG GCCATAACTA TAGGGCAGGT GGGGCAGGAA 120
CGGGTTAAAA ACGAGATCCA AGCCAGCCAG ATCGCAGGAG GTGCGGGGGC GTCGTCCCCC 180
TTCTGTTCTC CCCCCAAGGT CACAGTGCAT GCAATAAAAT ATATATACAG GAGCTAGATC 240
CGTCCTCTGC AGGGGCTCTG AGGGTCCAGA GTCCTCTTCG GGTGGCGGGA AGCCAGTGGC 300
GCTCCCTGGC GGCCAGGCCG GGCTGGAGCC ACATGCGTCG GGTCTCGAG 350

(2) INFORMATION FOR SEQ ID NO:1161:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 597 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1161:

GCCCCGGAGC ATCTTAAGAG CTGAGCGCAG CTGACAACATA GGGGCCGGAC CGTCGCAGGA	60
GGCGTCCGCT GGATACCTTC CCCCTTCCCT GACCTAGAGC TCTACAGCTG CTGCCTCGGT	120
ACTGACCGAG GGTTCACAGA GCTGTCTCAC CATTGCAAAA ACGTTATAGC AACAGCCTCT	180
GATTACGACA TGGCTGAGAT CACCAATATC CGACCTAGCT TTGATGTGTC ACCGGTGGTG	240
GCCGGCCTCA TCGGGGCCTC TGTGCTGGTG GTGTGTGTCT CCGTGACCGT CTTTGTCTGG	300
TCATGCTGCC ACCAGCAGGC AGAGAAGAAG CACAAGAACC CACCATACAA GTTTATTCAC	360
ATGCTCAAAG GCATCAGCAT ATACCCAGAG ACCCTCAGCA ACAAGAAGAA AATCATCAAA	420
GTGCGGAGAG ACAAAGATGG TCCTGGGAGG GAAGGTGGAC GTAGGAACCT GTTGGTGGAC	480
GCAGCAGAGG CTGGCCTGCT AAGCCGAGAC AAAGATCCCA GGGGGCCTAG CTCTGGATCT	540
TGTATAGACC AATTACCCAT CAAAATGGAC TATGGGGAAG AACTAAGGAA CCTCGAG	597

(2) INFORMATION FOR SEQ ID NO:1162:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 476 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1162:

GAATTCGGCC TTCATGGCCT AGAAATAACT TAAATCCTG AATCAGATGT TTCTCCGTAC	60
ATGGCCTATC CAGATCACCG TAGGGTGAAG CTCAAAGTCA GCAAGCCTCA CCCACATACT	120
CAGAGCTTCC TTTCAGTGTT GAGACCTTCT TCCCTCTGAG CAGATGACAA AGGAGTTTGA	180
AACCGCCTG GCCAACATGG TGAAGCCCCG TCTCTACTAA AAACACAAAA ATTAGCTGAA	240
ATGGTGAAGT TAATCCCAGC TACTCAGGAG GCTGAGGCAG GAGAATCGCT TGAATCCGGG	300
AGGCGGAGGT TGCAGTGAGC TGAGATCGTG CCATTTTATT CCAGCCTGGG CAACAGAGCA	360
AGCCATCACA GATTTGGGAG CAACCAAGAA AGCCAGGGAC AGGGTATGCT TGGTAACCTG	420
GCAAGAGCTG ACAAAGGGGA AAAATAAAAC CCCACAGAAA GAGCAGGGAA CTCGAG	476

(2) INFORMATION FOR SEQ ID NO:1163:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 482 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1163:

GAATTCGGCC AAAGAGGCCT AGATGAACAT GAACCTGCGG GAGCTGTACC TGGCGGACAA	60
CAAGCTCAAC GGCTGCAGG ACTCGGCCCA GCTGGGTAAC CTGCTCAAGT TCAACTGCTC	120
CCTGCAGATC CTGGACCTCC GGAACAACCA CGTGCTAGAC TCGGGTCTGG CCTACATCTG	180
CGAGGGCCTC AAGGAGCAGA GGAAGGGGCT GGTGACCCTG GTGCTGTGGA ACAACCAGCT	240
CACGCACACA GGATGGCCT TCCTGGGCAT GACACTGCCG CACTCTCAGA GCCTGGAGAC	300

GCTGAACCTG	GGCCACAACC	CCATCGGGAA	CGAGGGTGTG	CGGCACCTCA	AGAACGGGCT	360
CATCAGCAAC	CGCAGCGTGC	TGCGCCTCGG	GCTGGCCTCC	ACCAAGCTCA	CGTGCGAGGG	420
CGCGGTGGCG	GTGGCGGAGT	TCATCGCTGA	GAGCCCCCGC	CTCCTGAGAC	TGAACCTCG	480
AG						482

(2) INFORMATION FOR SEQ ID NO:1164:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 494 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1164:

GAATTCNGCC	AAAGAGGCCT	AAGGAGCGCT	GTTAAAGCTG	ATACATTCCT	GTGGGTCAAC	60
TATGCAACTA	ACTCAGATT	TGAGCAAACA	AAGCTCTCAA	GTTGGTGATC	CTCAGGAGTC	120
TCTGCATTAG	TTGGACAGCT	CTTCTGGAAT	TATCTTCTAA	GTCAACTGTG	GGTGGGGTAG	180
GTGGCTCTGC	TGATTTTTCG	CTGGACTTCC	ACATTTGGGA	CCAGTTGGCT	GTNATCAGCT	240
CTAGAAAGGG	TGTGGCTGTT	TTACATTGGC	TGTTTTCTC	ACATTCCTCA	AGCAGGTAAT	300
GTAATAAAGA	ACTGGAGAAA	TACAGTCAGA	TGGGAAGTAG	CCCCTGCTGT	CAAGGAGCTT	360
GCCATCTAAT	GGGGGAGACA	GGCAAGTAAA	CCAAAGACTA	CACAGTGCAG	TATGGTAAGT	420
GCCATGATT	TGATGTGACA	GGGCACAGTG	GACGACCTTC	CAAATCAAAG	CAAGTAACTA	480
GGGGCAGACT	CGAG					494

(2) INFORMATION FOR SEQ ID NO:1165:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 298 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1165:

GAATTCGGCC	TTCATGGCCT	AACTCTTATC	TGTGAACACA	ACTTTTCAGC	ACTACAAATG	60
CAAGCAACTG	CGCAGTCACA	GTTGGGGCTG	CTAATTGGA	AATCCAGTTT	AGGCTGATTT	120
GAAAAGACAA	CAGCATTTTT	GCAATCACTG	GTGTATCCTT	TACGAGAGAG	CTAGTCATGC	180
CATTTTTTGT	TTTCTGAAGA	CGGCCTTTTT	TTCTTTTTTA	TTATTATTAT	TTTTTTAAAT	240
TTGGGATCTT	GCCTAATTCT	TTAGTACAAA	GCCTGGCCCT	AAAACCGTAG	AGCTCGAG	298

(2) INFORMATION FOR SEQ ID NO:1166:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 266 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1166:

GAATTCGGCC	TTCATGGCCT	AGATAGAAAA	GAATATTCCA	AGTGTATGAA	GTATAGAGGT	60
GGGGAAGTTC	AGGGTAGAGA	AGTANTAGCA	GGAATAGAAT	ATAGGGGGAC	AGAAAAATAG	120

AGTGGAGCCA GATTCAGAGA ACTTTNAGAA GCAGGTAAAG AAGTTTAGGA TTAATGGACA 180
 AGTCATTGGG TCTCCAGGTT TCTTTGAGGG AGAGTGATAT CTGAGCTCTG TTTTAGAAAG 240
 ATTAATCTGA AAGGAGGTAA CTCGAG 266

(2) INFORMATION FOR SEQ ID NO:1167:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 499 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1167:

GAATTCGGCC TTCATGGCCT AGGTAAATAA TGCCAAGTTA CTGGGGTCTA GAAAGAAAGT 60
 TTTCTCTTGG ATCAAGAGAG TGTGAGTTTC CTAAGTTTCT TCAGCAGGGA TGTGGTCCCT 120
 TTAGTTAGGA GGTTTAAAT CACCAGGAAG TAAGGGTGAG GAAGAAAGTC TGGGTCCATG 180
 TTTGAGAAGG TGA CTGATGG TGGTGGAGT CCTTCCTGTG ATGAGTTAAT GATGCGTATT 240
 TCTGATAAAG ATGGGAAGTT ATTTACATCG ACATTAACCA AATCTACCCT TCATGCAGAA 300
 AGAAAGAGCT CTTGGGCCAT TCTCTATTAA TGAAACCATA CCAGGGTCAA TATTACAGTG 360
 TCTCTGAAAT AACTGAAAA TACTTCCCTG GCTCAGGTGG TGGCCCATGC TACCTCCAGG 420
 CAGTTCTACT TGATTAATGA TGCAATGGAG ATAATCCTAT TGCATCCACC ATCAAGGAGA 480
 GTTGGGCAGT CAACTCGAG 499

(2) INFORMATION FOR SEQ ID NO:1168:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 425 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1168:

GAATTCGGCC TTCATGGCCT ACACAAACAA ACCCAGAATA CTCTATTACT GTATTTGTGG 60
 GGTACAATCC ACTCAACTCT ATTATGAAGC CCAAAAAATA AATCTGTTAA AAACAATAAT 120
 AGCTACACCA ACCTGTTAAG AGATAGGTAA TATAAAAATA TATAGTTTGA GACAACTAAA 180
 TCAAAATGGA GGAGGGGATA GAGTTCAAGA AGTAGAATTT TTTTGCGTGT GCTTTTCTTG 240
 GCCTTTGTTT GCTTCTATTC TTTTATTTGG AATCAAAGAT AAGTTATCAA CTCTTTAAAA 300
 TAACCTGTGA TATGTATAAG ATGTTTTCTG TAAGCCTCAT GGTAACCACA GTACAAAAAC 360
 CTATAGTACA ATTCCTAAAA ATAAAATACA AAAAAATTAA AATATACTAC CAGAGAGCTC 420
 TCGAG 425

(2) INFORMATION FOR SEQ ID NO:1169:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 318 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1169:

GAATTCGGCC	TTCATGGCCT	AAAAGGTTTG	ATCTTGTAAT	GTGTCACTGT	GTTTCCTTAG	60
TGGCCAGCCA	GCCTTCAGAA	TAGCTAAAGG	CCTTCCTTCC	TTCCAGTCAG	CCTGAGAGAG	120
AACACCTGTC	CCCTAAGCAC	CTGGTGTCTC	CATTGGAGGC	AGACTGCTCT	CAGGAGACTA	180
CTAGAAGCTT	CAGCCCGGAA	GACAGGCTGC	TCTCTCATGC	TGGTGGCCCA	AATTGAGAAA	240
GTGGTGTCCC	TTCCTGATTT	TGCCACCAGC	CCTACCGAAT	AGTTGTAAAC	CAGTATCAGG	300
AATTGGGATC	CTCTCGAG					318

(2) INFORMATION FOR SEQ ID NO:1170:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 346 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1170:

GAATTCGGCC	TTCATGGCCT	ACATTGGTCG	TTTTATTGCC	ATGGCACTAT	TTCATGGAAA	60
GTTTATCGAT	ACTGGTTTTCT	CTTTACCATT	CTACAAGCGT	ATGTTAAGTA	AAAAACTTAC	120
TATTAAGGAT	TTGGAATCTA	TTGATACTGA	ATTTTATAAC	TCCCTTATCT	GGATAAGAGA	180
TAACAACATT	GAAGAATGTG	GCTTAGAAAT	GTACTTTTCT	GTTGACATGG	AGATTTTGGG	240
AAAAGTTACT	TCACATGACC	TGAAGTTGGG	AGGTTCCAAT	ATTCTGGTGA	CTGAGGAGAA	300
CAAAGATGAA	TATATTGGTT	TAATGACAGA	ACGGCGTTTC	CTCGAG		346

(2) INFORMATION FOR SEQ ID NO:1171:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 240 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1171:

GAATTCGGCC	TTCATGGCCT	ACACTTTTATT	CCCTTTTAAAG	TCTGGTAAAG	AATGAATACT	60
TGGACGTTTT	GTTTTCATGCA	GATTTAGTTA	GCAACTCGAT	TATCAAATGG	TAGAATATCT	120
GTATGCACTG	AAGCCAAATT	CTCAGTAACT	CAGCTTTTGN	TAGTCATATG	AGGATGATGA	180
ATAATAGGAN	TCCAGAGCAG	TTAACAAATT	GATACAAGTG	GTAGGAAAAT	TTGATATGAA	240

(2) INFORMATION FOR SEQ ID NO:1172:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 277 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1172:

GAATTCGGCC	TTCATGGCCT	AGTTTCNTTT	TTGTATCTCT	ACTGATATCA	CCAGGATAGT	60
NTACTCTCCT	TCTAGCTTTC	TGCTTACCGC	ACACTGGATA	ACACACACAT	ACACACCCAC	120
AAAAATGCTC	ATGAACCCAA	TCCGGAGAAG	GTTCCAGCAG	GTCCCCCACC	CTCCCCCTCT	180
CCTCCTACTT	CTCCTCTTGA	CAGCGAGGAC	AGGAGGGGGA	CAAGGGGACA	CCTGGGCAGA	240

CCCGCCGGCT CTCCCCCAC CCCACCCCA TCTCGAG

277

(2) INFORMATION FOR SEQ ID NO:1173:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 258 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1173:

GAATTCGGCC TTCATGGCCT AGAAAAGTCT AGAAAATAGC TTAAATAACA AACACGTGTG	60
GATTGTAGTAC ACCAAGAGCA AGGGAGACCA TTTAATGCAG TTATTAAACA ATATTTAGTA	120
CTTTCCTTTA CCTTGTCTGC TGTGCCATCA TTCATGCCTG TCAGTGTTAA AAATCCCCAA	180
ATTTCCCCAA CAGATTTTCA TTTCACTTCC GTCAACTTTT AAATTAAAGT TTTTAAATTC	240
CTGTCCCCAC TCCTCGAG	258

(2) INFORMATION FOR SEQ ID NO:1174:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 334 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1174:

GAAAGTTGCT TTTGATGTCA AAATGGAAAA TGAAAAGTTA GTTTTAGCAT GTGAAGATGT	60
GAGGCATCAG TTAGAAGAAT GTCTTGCTGG TAACAATCAG CTTTCTCTGG AAAAAACAC	120
TATTGTGGAG ACTCTAAAAA TGGAAAAAGG AGAGATAGAG GCAGAATTGT GTTGGGCTAA	180
AAAGAGGCTG TTGGAAGAAG CAAACAAGTA TGAGAAAACC ATTGAAGAAT GTCTTGCTGG	240
TAACAATCAG CTTTCTCTGG AAAAAACAC TATTGTGGAG ACTCTAAAAA TGGAAAAAGG	300
AGAGATAGAG GCAGAATTGT GTCGGCCACT CGAG	334

(2) INFORMATION FOR SEQ ID NO:1175:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 403 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1175:

GAATTCGGCC TTCATGGCCT AGTGCTTGAA CTCACGCATC TGTTTTACCT GCATCTGCAG	60
GCGATGGGGC AGGGGCCACG GAAAGAGTCT GAGGGCTGCT TGGTGTAGTC AGGTGTGTGTC	120
CAGGCATGCG GAGCTGTGAG TGCCTGCAGG AGAGACACCC AGGAGGAGTT TTTACATTTT	180
GGTCTAAAAA GCTCTTGGAT TCATCTCATC TCATGGAATG ATCCTGTCTGG ATGACGCTGA	240
CGTGATTGCT TCAGACTTAG AGGTGAATAA ATTGAGGTCC AGAGAGGTCA CAGTCACGAA	300
GCTCATGGTA GACTGAGGCC ACTAAACACC CGTCTCCTGA TTTTCAGTGG CGTCTCATT	360
TGCATACACC TGGGCCATCT TGGTTTTTGC AAGAAAACCT GAG	403

(2) INFORMATION FOR SEQ ID NO:1176:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 590 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1176:

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GAATTCGGCC TTCATGGCCT AGGTACCTTG AACATGGCTG TAAATTAATC TTTAACTGCC      60
TTGGTGGAGT CTTCTGATT TATTGAAGAG AATAATCACG AAAATAATTT TTGTTGTTT      120
TTTGAGACGG AGTCTCGCTC TGTCAACCAG GCTGGAGTGC AGTGCCACGA TCTCGGCTCA      180
CTGCAGCCTC TGCCTCCCAG GTTCAAGTGA TTCTCTGAT TGAGCCTCCT GAATAGCTGG      240
GATTATAGGT GTGCACTACC ATGACCAGCT AATTTTTGTA TTTTAGTAG AGATGGTGTT      300
TCACCATGTT GGACCGGGCT GGTCTCGAAC TCCTGACCTC AGGTGATCTG CCCTCCTCAG      360
CTTCCCAAAG TGTGTTGGATT ACAGGCATGA GCCACCGCAC CTGACATAAA TATTTAATGT      420
AATACCGTGT AAGACTTTC CATTGGGTTT TGAGAAACAC GTTAATGAGA GAAATGCTT      480
AACATTGGAG AGGATTGCAG AGAATATTGA CTAATATGGT GGGGTGAGGA GGAACAACAT      540
CAATTAAGAT TCAGATTTAT TATTTAAAAA AACTAAAAGG CGGCCTCGAG      590

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(2) INFORMATION FOR SEQ ID NO:1177:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 562 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1177:

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CTCGAGGTAG CCACAGTCCT GATCCTAGTG ACAAATGGGG GCATGTGTCT ACATCCGGGT      60
CGGCGGAGGG CTCATTTTCAT CTGGCCTGGG GGGAAATGAG TATTAATTTG TTTACACAGA      120
CGTAAACACA GCCCAAACG CATCAGCACG TTGACTCAAA CGCCCGCAAC GCCAGGGCAA      180
AGGCAATTTG GTTAACAGGG GGAAGCGAAC AGACGGAGAC GCCTGGAGAC CCAGGTGCCA      240
CAACCCGGTT AATCGCGGTG CAAATAAGGG CAAGTCCCCT CCCCTTGTCG GTGTGGTCTT      300
GACAACGACA CTAGTTCATT CTAATAACAA GGCGGGCGGG GGGTCAGATG GGCCACACAC      360
ACCCATTTTC CTCAACGGGA CCCCAACGCG ATCTCAGCCT TGCTGTGCTA CTTTAGGGCA      420
AGACGCGTTC CCCATTGCGA AGCCGCAGGA AAGCGCGGCG AGAGCGGGTT AGCCCTCGGA      480
GCGGCTAAGA GCCTCGGAAT AGCGCAGAGG AAGTCCCAC CCCTCTCGGG GCTGGGAGCC      540
CTAGGCCATG AAGGCCGAAT TC                                     562

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(2) INFORMATION FOR SEQ ID NO:1178:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 339 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1178:

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GAATTCGGCC TTCATGGCCT AGAAGCACAG GTAAAACAAG CTGGGGCTTA TGGTCAGCAT      60

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TGGAAGCAGG	GAGCAGAGTG	GGGAAAACAG	CAGTCTTATG	GGAAGTGAAC	AGGGTTGGAG	AATGCCCAGC	120
GTGATCTGAC	TCTATCTGCA	AGGTAGTGTT	GGAAGTGAAC	AGGGTTGGAG	AATGCCCAGC		180
TGGTGTCCAC	CGCAGAATTG	ATTTTCATGTT	TGGTATGCAG	GGACCCCCCA	CTCCACACTT		240
AGTCACAGAA	ATCTGTGTTG	ATTGTTGTGG	CATGAAAGCA	GGGAAAAATA	GTTTGTTTTT		300
TTCTCCACAC	TTCCTTCCCA	AGATCCCGGC	TAACTCGAG				339

(2) INFORMATION FOR SEQ ID NO:1179:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 353 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1179:

GAATTCGGCC	TTCATGGCCT	ACTCACCGGA	GAAAAGAAGT	TTCNGAAGAA	AACCACAACC	60
ATGCCAATGA	ACGAATGCTA	TTTCATGGGT	CTCCTTTTGT	GAATGCAATT	ATCCACAAAG	120
GCTTTGATGA	AAGGCATGCG	TACATAGGTG	GTATGTTTGG	AGCTGGCATT	TATTTTGCTG	180
AAAACCTCTC	CAAAAGCAAT	CAATATGTAT	ATGGAATTGG	AGGAGGTACT	GGGTGTCCAG	240
TTCACAAAGA	CAGATCTTGT	TACATTTGCC	ACAGGCAGCT	GCTCTTTTGC	CGGGTAACCT	300
TGGGAAAGTC	TTTCTGCGAG	TTCAAGTGCA	TGAAAATGGC	ACATCTCCTC	GAG	353

(2) INFORMATION FOR SEQ ID NO:1180:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 296 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1180:

GAATTCGGCC	AAAGAGGCCT	ACAGAGTGCT	GTGCTTAAGT	TTTACTTCTT	TCCACCTTTA	60
AATCTCTGAT	AAGTTTCTTT	TTATCTAAAG	GTTCCACTTT	GTTTCATTACT	TTTTGTTTCC	120
TTATTATTGA	TTTGTTTCGAG	AACCTGAGTT	TCTTGACCTG	TGTGATTTTG	TACCACCTGG	180
ACTTTCTGAC	TGTGTTTGCC	CAGGCTGGAG	AGCAGTGGTG	GGATCATAGC	TTACTGGACT	240
CAAGCCATCC	TCCCGCCTCA	GCCTCCCAAG	TAACCTGGAC	TATGGGCACA	CTCGAG	296

(2) INFORMATION FOR SEQ ID NO:1181:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 277 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1181:

GAATTCGGCC	TTCATGGCCT	ACTTGAGTTG	TACATTAGAT	CTTTAAACTT	GTTAGTCCTA	60
CATATCTGCT	ATTTTTTATC	CTTTGACCTA	CATTTTCCCA	TTTCCTCCCA	GTGTTCTCTC	120
CCCAGGTAAT	CATTGTTTTA	TTCCCTTTCT	CTGTAAATTT	GACTTTTTTT	TTTGGAATTCC	180
ACATATAAGT	GAGATCATGA	TCATGCGGTA	TTTTTCTTTC	TGTGTCTGGC	TTATTTTACA	240

TAGTATTATG TCCTCCAAGT CTACCCACGA ACTCGAG

277

(2) INFORMATION FOR SEQ ID NO:1182:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 192 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1182:

GAATTCGGCC TTCATGGCCT AGAGATACTG GCTGGCAATT CTTGGCGTTC CTTGGCTTGT	60
AGCTGTAAGA TGCCTCTAA TATCAGTCTC TGTTGTCATT TGCCTTTTCT CTGTGTCTGT	120
GTTCAAATGT CCTTTTTTTT TTTTTTTT GGGAGTCTTG CTCTGTTGCC CACTCAAAC	180
GCTGGGCTCG AG	192

(2) INFORMATION FOR SEQ ID NO:1183:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 296 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1183:

GAATTCNGCC AAAGAGGCCT AGTAAATAGT TGTCTGTGA CATGTTTGA AGAATAATGA	60
CAAGAACAAA AATCTGTGTG TTCAGTATAG ACACAACCAT CCTTTTCTTT TTTTTTTTTT	120
TGAGACAGAG TCTCGCTCTT GTTGCCGAG CTGGAGTGCA AGGGTGCGAT CTCAGCTCAC	180
CGCAACCTCC GCCTCCGGG TTCAAGCAAT TCTCCTGCCT CAGCCCCCG AGTAGCTGGG	240
ATCACAGGCA TGTGCCACCA CGCCCGGCTC TTTTGTATT TTAGTAGAA CTCGAG	296

(2) INFORMATION FOR SEQ ID NO:1184:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 234 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1184:

GAATTCGGAC TACTACAGGT GATACTACAG TGACTACTAC AGTAATTCGG ACTACTACAG	60
GTGGCTAATT CGGATTACTA CAGGTGGACA TAATTCGGAC TACTACAGGT AATTCGGACT	120
ACTACAGGTG AGCTAATTCG GACTACTACA GGTGGACATA ATTCCGACTA CTACAGGTGC	180
ACCTGTAGTG GAGAACATTT AGCAATGATA AAGCCGCTGC TGATCCTTCT CGAG	234

(2) INFORMATION FOR SEQ ID NO:1185:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 300 base pairs
- (B) TYPE: nucleic acid

(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1185:

GAATTCGGCC	AAAGAGGCCT	AGAACAGTTT	AGAAACAATT	TCCCTGCCTT	TGCTTTGGGT	60
TCCCTGTGAT	TGTTCTCCAC	ACTGTTTTCC	TGGCTCTATC	TGTCTCCCTT	GCCACGGCCA	120
CTCAAGCCTA	GCTGCCCAAC	AGTCCTTCC	CTGAAGAACC	CCGGCCTTCA	GGCTTGACAG	180
GTGATCTCAT	CCCTCTTCTT	TTCTCCAGG	TGTTGTAGA	CTTCCACCTT	CCCTTCTTCT	240
CCTGGTCCTT	TCCCCTTTCT	AGTGCCAATG	TGGGCCACGC	TTTCATCCCA	CCTACTCGAG	300

(2) INFORMATION FOR SEQ ID NO:1186:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 324 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1186:

GAATTCGGCC	TTCATGGCCT	AGTGATGAGC	CCTCTCTTTC	AGCTAGGAAA	ATGACGGTGT	60
TCAGAAAGTT	AAAACCTCTT	CGCTGGAAGG	ATTTCATCTT	AAAGTTGGGA	GACTGGAAGA	120
AATTAAAGTG	TTCTAAATGG	AAGAGCATTC	ACCACATGTG	TTCTGTTTGG	GGTTGACATT	180
TAGCTTTTGT	TTTTATTTTA	GAAACGGAAG	ACTCTGGTAG	CAGTCCTTGA	AATCTTGATG	240
CCATTGCTAT	TTTCTGCATT	GTATTGTATC	TTGTTTTTAG	TAGTGCTCCA	ATAAAAAGAC	300
CTGCTACTAG	CTGCAAAACT	CGAG				324

(2) INFORMATION FOR SEQ ID NO:1187:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 308 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1187:

GAATTCGGCC	TTCATGGCCT	AGTACGTTGC	TGAAAAGAAG	TTTATTGCTA	TTTTCTTATT	60
TTATTATACA	AAACTAGATT	TGCTTAAAC	ATTTCCAGT	CTCTTTAAAG	GAATGCTAGT	120
TAGTGGGAGG	CCACAGCTAG	TAAATTACCC	TCAGTAGTGG	TTTCAAGTAG	TCCATAACTA	180
TAAAAATCGT	TACGGCCAGG	ATATGCCGGA	ACAGAACACT	CCCCACTGGG	GTCCTCAGCC	240
TTGGATGTCA	GCTCGGCCCC	TCAAGGGGTC	CCTACACCTG	GAAGCTGATT	CCACTCATCA	300
GTCTCGAG						308

(2) INFORMATION FOR SEQ ID NO:1188:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 251 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1188:

GAATTCGGCC	TTCATGGCCT	AGAATGAAGA	AGGTTCCCAA	GAAGTTAGAG	GAGATTCCCC	60
CAGCCTCTCC	GGAGATGGCA	CAGATGAGGA	AGCAGTGCCT	GGACTATCAT	TACCAGGAGA	120
TGCAGGCTCT	GAAGGAGGTC	TTCAAGGAGT	ATTGATTGA	ACTGTTTTTC	TTGCAACACT	180
TTCAAGGGAA	CATGATGGAT	TTCTTAGCTT	TCAAGAAGAA	ACATTATGCC	CCATTACAAG	240
CACCACTCGA	G					251

(2) INFORMATION FOR SEQ ID NO:1189:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 359 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1189:

GAATTCGGCC	TTCATGGCCT	AAGGAGTTGG	AAATTGTGCA	CAAAGAAAGG	TGGTGAATAA	60
GTAAAGTCGT	AAATTCAAGA	CCACAACAGA	AAGCTTCACT	GCAGACACTG	GACTTGAACC	120
ACCATTGAAA	ACAGTCAGGA	TTGGGAGATG	ATAATTAGGA	GGATGTGTAT	TCTAGCTGTG	180
GAATTTATTG	TGGGCAAGCA	TAGGAATGAG	AAAGTACAAT	GAAAAAATGT	AAGTAGACCC	240
ACCAAGTTAG	AGAAGAAGGT	CCTGGTTAAG	AAAAATGAAA	GATTTTTTTG	AACAACAGAT	300
TAATGTGATG	AAATAGATGT	TCAAGAGTGA	AGATAAGTTG	AAGATAGGGA	CCCCTCGAG	359

(2) INFORMATION FOR SEQ ID NO:1190:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 245 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1190:

GTGTTAGGC	TGGTGTGTT	ATGTTGCTGT	TGTTATGCTG	GTCGTGCTGC	TCCATGTTCT	60
CCAGGTGTTT	TTCCCTTTTA	TCGTCACAGT	TACCCCGTAC	ACCTGACAAC	TGGACATCTG	120
CGCCTGGGGT	CTTCAGCCTA	AACACACCTA	AACCTCCAC	CAAACCCCTC	TGCTTCCGCC	180
TCCCGTGTG	TGTGAGCGCC	TCCACTGCCC	ATCCCTCTGC	TCAGGCCCCA	TTCCAGGGC	240
TCGAG						245

(2) INFORMATION FOR SEQ ID NO:1191:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 257 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1191:

GAATTCGGCC TTCATGGCCT AGTCTCAAAA AAAAAAAAAA AAAATAGTGT TCAGCAAGGT	60
TGAAGCATAA AAGGTTAATA GCCAGAATCA TTTATCAATT GTATTTCTAT ACATCTACAA	120
GACACAATCT GAAAATGAAA TTAGAGAAAC AATTTCACTG GGCAACAAGA GCAAACTTC	180
ATCTCAAAAT AATCATCATC ATCATCATCA TCATCATCAT CATCATCTAC AATGTCATT	240
CCCATCCAAC GCTCGAG	257

(2) INFORMATION FOR SEQ ID NO:1192:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 748 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1192:

GAATTCGGCC TTCATGGCCT AAGGACATGG CAGAGTTCCT GCTAAAAGAG AAGACAGTTA	60
TTAAGGAGG TTTGAGATTC AAGGGCTTTT TTAATTTTAA AATTAACCAT GGTAGAAACC	120
TGTGTGTTAA TATGCTGAGG GAAGTTGCCA ATAGTGAGAT GAAAGATCTA GGCAAGGGGA	180
TAGCAAGGTG ACTGCACCAG ATACCTGGAT CTGGGCAGGA ATAAACCTCA ACAGTGATCA	240
TGTTGACCTT GAGTGACAGG GTATAATGTT TGGGAAGGTG CTTGTAAAC TATAAGGGGC	300
AATACAAACA TGTAATACAC CTTCTCTGAG ATCCGGGAAA GGACAACCTG AGCATAGGTT	360
GGGGCTGGTC ATAGGCCACT CTCCCTACT GTTCTCTAG AGTGTGTGTA GTCCCTAGCA	420
AGTCTCAGAT GCCTCGACCT TCATGGCCTA GAGAGTTCTC ATCAGAACAG GAAGGCAGTG	480
ATGATCCATT GCATGGGCAG GATTGTTCTA CGAAGACGAA GATCTCCGGA AAGTGAAGAA	540
GACCCGAGG AACTAACCT CAACCTCTGC CATCAAGG CAACCTAACA TCAAACAGAA	600
GTTTGTGGCC CTCCTGAAGC GGTTTAAAGT TTCAGATGAG GTGGGCTTTG GGCTGGAGCA	660
TGTGTCCCGC GAGCAGATCC GGGAGTGGA AGAGGACTTG GATGAATTGT ATGACAGTCT	720
GGAGATGTAC AACCCAGTC GACTCGAG	748

(2) INFORMATION FOR SEQ ID NO:1193:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 227 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1193:

GAATTGCGAA CATGGCAGCG CGTTGGCGGT TTTGGTGTGT CTCTGTGACC ATGGTGGTGG	60
CGTGCTCAT CGTTTGCGAC GTTCCCTCAG CCTCTGCCCA AAGAAAGAAG GAGATGGTGT	120
TATCTGAAAA GGTTAGTCAG CTGATGGAAT GGAATAACAA AAGACCTGTA ATAAGAATGA	180
ATGGAGACAA GTTCCGTCGC CTTGTGAAAG CCCACCTAA TCTCGAG	227

(2) INFORMATION FOR SEQ ID NO:1194:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 258 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1194:

GAATTCGGCC	TTCATGGCCT	AGTATATATA	TAAAATACTG	AGGATTTAGG	GCTGATGTAT	60
ATAAATAAAA	TACTGATAAC	TTTTTTCCTT	TCTTTTCTT	TTTTTTTGA	GATAGTGTCA	120
TGCTCTGTG	CCCAGGCTGG	AGTACAGTGG	CACCAAACCG	CTAACTGCAG	CCTTGCCCTC	180
CCAGGCTCAA	GCAATCCTCC	TGCCTCAGCA	CCCTCAATAA	CTGGGACCAC	AATTGCATGC	240
CACCAAACGC	ACCTCGAG					258

(2) INFORMATION FOR SEQ ID NO:1195:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 314 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1195:

GAATTCGGCC	TTCATGGCCT	AATGAATTCT	CATTTCCTGG	AGGCTGAAGA	TCTGTGCAGG	60
TGTCTGTGGC	CAATGTTAAG	CCTACGACTT	TAGATGAGCT	GGCATAAATC	TTGGGAGAGT	120
TTTCTTGTCT	GTGTTCCCTC	TGAATTTCTC	TGTGCTGTTA	GAGGCAGGGA	CAGAAGAGAA	180
CCAGCATGGC	AGTGCTGGGC	TCAGGGTGAT	GCCTGCCTGC	CAGCACAGCG	GTTCTTGTCC	240
CTGTCCACA	TTGCTTCTTG	GAAGCCTTTT	TACAGCCTCA	ATCATCTTGC	TTTTTCTACC	300
GCAGCTATCT	CGAG					314

(2) INFORMATION FOR SEQ ID NO:1196:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 385 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1196:

GAATTCGGCC	TTCATGCGGG	GACTTCCACT	CTTCTCGTT	TTCTCGGAGC	TCCGCCTCCA	60
GCTCCTCTAT	CTTCCTCTTC	AGCTGCGTGT	TCTTCTCCTC	TCTGTGGATC	TCACGGCCTC	120
TTCTCTGTCT	CCACGCTGGC	CACCGACTCC	TGCAGCGCCG	TGGGCAGCCG	GGCGTCGCTC	180
TCCCGCCGGG	TCTGCAGCTC	CATCTCCAC	CTCTTCCCGT	GGGCAGCTCT	CTGCGTCGAG	240
GCCGCCTTCA	GCTTGTGGTT	CCCAGACTGC	AGGTGCGTGT	CAGCTGCAGC	GGCCTGAGAG	300
GCCTTTCATC	GTCCGTCCCG	TTGACACTGG	ATGCCGGAGT	AGAAGATGGG	GCTCCATGCC	360
CGGATTCTCG	GGATTATTAC	TCGAG				385

(2) INFORMATION FOR SEQ ID NO:1197:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 256 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1197:

GAATTTGCAG	TGAACCGAGA	TTGTGCCATT	GCACTCCAGC	CTGGGCAAAA	GAGCAAGACT	60
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CCATTTCAAA AAAAAATCTT AAAAATACGA AGTTTTTCAT TTTTCTTAAA TTTTCATTGT 120
 GACTACTTTA GTAGACTTGC CAGTAATAAG CCAGTTACCG CTTGAATCTC AGTTTCTTTA 180
 TCTGGAAAGT GGTCAATTAT TATCTGCTGT CCCCTTACCT AGAGGGAATC AAATGCGTTT 240
 GATACAGGTT CTCGAG 256

(2) INFORMATION FOR SEQ ID NO:1198:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 446 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1198:

GAATTCGGCC TTCATGGCCT AGAGAGCCCA TCTCCATCTG CCAGCCTGGA AGCAGCCATG 60
 GCAAATGGGA TGTGTCCAC TGCCCCGTT TGGTGCCACA GTTGGGTTTA TTCTCACAGC 120
 TGCAAACCCA CGTGCTGGGC TGCACAGCTG CCTGAACGAA GCTGGAGCGT GCAGAACAAA 180
 CTGCATGGAA TGTCACGTGG GGTTTTCCAC TCTCGCCAC AGTGAGTTGG CAATGCCTGG 240
 CCACGTGTGC TCTGTGGTCT TTGAAGTTGA TCTGGGAGGA CAGAANTTCA AAAGGAAGAT 300
 GAAGGCCCA GCAAGGGAGG TATTCCTGTC TTGAGCAGAA GGTAAGGTA GAAGGTGCAG 360
 ATTAGGTACT GGAATAGTC ATGGTTTGGT TTGAATGGAG TAGAAGATTC CAGAGGAAGA 420
 GCAGTGGGGC ACAGTGGCTC CTCGAG 446

(2) INFORMATION FOR SEQ ID NO:1199:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 369 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1199:

GAATTCGCCT TCATGGCCTA AATTGTAGCT AGGAAAATAA TATATGTCTT AGTTTAAGAA 60
 CTCATACTCT GGAATCAACT CATTGCACTT TCCTATATGT TTGGCCATGG GCAAAGCACA 120
 TAACCTCTTA ATCAATTGGC TCGTCTCCAA GGTGAGGATA GTTATACTTA ATCCTCTTTA 180
 GGAGTGAGAA TAAAAATTAA ATATGTGTGT AGCATAGTGT CTACAATGTT AGAGGTATT 240
 GAAAAGTGAT AGTTTATTTT TTGGAATTAT TTAGCATTAT TAAAAACAAG GGGGAGCACA 300
 CCGTGGCAGC TTTCTGGTCC CAGCTACTTG GGAAGCTGAG GTAGTAGGAT CGCTTGAGAT 360
 CCGCTCGAG 369

(2) INFORMATION FOR SEQ ID NO:1200:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 483 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1200:

GAATTCGGCC TTCATGGCCT AGACAGGTTG CTAGCTACAT GGGTCTCTGA AGAAGAGTTT 60

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TCCAGCAGAA GGAGCAACTA GTGCAAAGCC CCTGAGACAC AACTGCACCT ATCCAGATTA 120
AGGACCACCG AGGAAGCCAC TGTAGGAGCA CAAAAAAGT AGGAGATGAA CAGAGAGGTG 180
AGGGAGGCTC CGTAGGTCCT AGTATGCACT TTGGCATTTA TTTACTGATT GAGATGGCAG 240
GTCATTGGAG GATTCGGAGC AGAGGAAGGA TATAATCTGA CATTTTAGCA GGATCCCTTT 300
GAGTAAGTTA GCTGCGTAGA CCTAAGATGA ACAAGGACAG CCACAGCAAG ACCTGTAAGG 360
AGACTATCCT TGTAATCCAG GCAAGAGATG ATGGCAGCTT GGACCAGGGT AGTAGCAGTG 420
GAATTGATGA GAAGTGGTTG AAATCTGGAT ATATTTTGAA GATGGAGCCC ATGGGGTCTC 480
GAG 483

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(2) INFORMATION FOR SEQ ID NO:1201:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 192 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1201:

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ACCATATAAT TTGCCACTTG AAGTGTACAA ATTCAGTGAC TTTTAGTAAA TTCACAGTTA 60
TATATTCATT AGGATATTCA GAGTTATATA TTCATCACCA CAGTCACTCT TAGAACATTT 120
TAATAACCTC AAAAAGAAAC CATGCACTCC TTAGCCATCA CTCCTAACCC AACTCTCCCT 180
CTACCGCTCG AG 192

```

(2) INFORMATION FOR SEQ ID NO:1202:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 281 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1202:

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GAATTCGGCC TTCATGGCCT ACTTTAAACA TGTGGTCTTA CTGCCTGCAA ACACATACAG 60
ACTCTTAATT TTTATTTACA TAGATGTAAA TATACACATA TATTACTCTA AAGATAAACC 120
TTAAGGGTAA GAAAATTATA AAGTATGTGT GTTNTGTGA ATATGAATTT GTACCTATAT 180
TCAGAAGAAA AGAGCAATAT TGGCAGAAA CAAATCATCT TAATAAGGTA ACTAATTGGN 240
TGNGTGCAGT GGCTCAGGCC TGTAATCGCA TCACACTCGA G 281

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(2) INFORMATION FOR SEQ ID NO:1203:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 328 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1203:

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GAATTCGGCC TTCATGGCCT AGTGATCTAC TTAGGTAGCT CCTGGAAAGC AAAGGAGAGA 60
GAGCAAGACC TGTACAGACT TTGTTTATGA GGAAAGCTAT ATAAGGATTA TAAGAAGTGA 120
TAAATATTTT TTTGTTTCT TTTTGACAAA ATGGATTTTC TTCAGTTTCT TAAGCAGATG 180

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TATTATTTCT GGGACGTTTT AGCCATGTAG TTTCTTTTTA TTCCTCTTTG ATACCCTGAA 240
 TAACTAGCCT TAGAAACACA AGTAAAGCTC CCAAAATTC ATTTTCTACA TATTTTATTA 300
 CCAGATTGAA TTCTAGACCT GCCTCGAG 328

(2) INFORMATION FOR SEQ ID NO:1204:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 307 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1204:

GAATTCGGCC TTCATGGCCT AGGTCCTAAA AAGAGTAAAA GGTGAAAACA CTAAGTGATA 60
 TTCNAAACAA AAGAAAAAGA TGAAAAATAA GAACCTTGGT TAAAGAGCAG TCGAAATAAG 120
 TAATGATTAT AGCTATGATT TATATAGCAC TTNTTACAAG AAGCCAGGCG CTGTTTTTAA 180
 CACTTGACAT ACTTATTTGC TCATTTCATA ATTGTAACAA CCCTATCAGA TAGGTACTAT 240
 TTTTATCCCA CTTTACAGAG GAGAACTGA GGCACAGAAT TTTAAGTGAT TTGGCCGGGT 300
 GCTCGAG 307

(2) INFORMATION FOR SEQ ID NO:1205:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 425 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1205:

GAATTCGGCC TTCATGGCCT AAAAAAAT GTAGTCTAGA AAGAGACTAG GAATAGAACA 60
 CTGCTGACTT GTTCTTATAC CAAGAGCTGG AGGCATAAAC AGTTTTAATA AAAAAGAATA 120
 CTTGTATCT TTTGATGTAA CTTCCTTTA GAGATTCTGT TTCCCCTGTC TTAAATTGTC 180
 AGGCTATTTT TGATTGCTGT TTAAATAATT GGTAGTTACT ATTTGAGTCA NGCTTCTTAA 240
 AAAAAAAG ATATAAAAT TCGCCAGCTC AGCTTTCATT TAATTAGTAT CAAAGAAATG 300
 ATATCTGTGG CAGTGAACAT TAGTAGCTTG TTCCAGGGTT TATTGTAGGT TTGTTCAAGT 360
 CAGTACTGCC CATCTTGCA CTTAGTTTCT TGGAATACAG AGGTGGATAA GGTTCGCCCC 420
 TCGAG 425

(2) INFORMATION FOR SEQ ID NO:1206:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 504 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1206:

GAATTCGGCC TTCATGGCCT AAGACCAGCA CCATCGTGAG CAAGATTCCT GCTGCGCTGC 60
 TTCCAAAATG GAAAAGCATC ACAACTAAAT ACCTAATATC CTACCAAACA AACCACAGTC 120
 CCTACGTAGC CCTACTTCAG TCCCAGGAGA AGGAATCCAT GAATGGGCTG AGGTTCCGAG 180

GGTAGGTTGT	GGATGTCTTT	CTCTAGAGGG	GTCCCACACC	TGGAAAAGAG	GACACCCAGC	240
CCGNGGGATG	AGGGAAGCTG	GGCAAGGGAG	AAAGTTGTTG	AGTCACACTG	GGGACCCAG	300
ATGTAGTGAG	CTCAGCAAGA	AAAGCCAGGT	CCAGAGAGAG	TCGCACAGAA	TTCCTGACTC	360
ACAGCGCCCC	TCGTCCACA	GTGGAGAGGA	GGAGGAGGAG	GAGCAGAAGG	AGGGGGAGGA	420
GCTGCAGGAG	GAGGAGGATT	TGAAAGCGCT	TTGGCCTTGT	GTTATGTTTT	GCTTCTTTTC	480
TGTGCCCCCC	TCTAGGCCAT	GAAG				504

(2) INFORMATION FOR SEQ ID NO:1207:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 242 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1207:

GAAATTTTTC	AGTAACTCAG	TGTCTTTAAC	TAATAATTTA	ATCATTCTAG	TAAGAAAACA	60
TGCTTTGTAT	GATTTTAGTC	TTTACATTTA	TTAATTTATG	TAAATTAATA	TGTGGGTTTT	120
ATGATCACCC	ACGACATTGT	CCTAACTTGT	CGACTGTTCT	GTGTGCTCTT	TTAAAGAAGG	180
TAGTCTGTTG	GCCGGGTGCG	GTGGCTTACG	CCTATAATCC	CAGCACTTCG	GACAGGCTCG	240
AG						242

(2) INFORMATION FOR SEQ ID NO:1208:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 152 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1208:

GTAGAATTGT	ACAGTGCTTA	TGAGTTATGC	ATGTGTTTCT	GGTCTTTGTT	CTAGGATTTT	60
TTTTTTTTTT	TGATTGCTGC	TCCAGTTGCC	TTACTTACTT	TGACATTGGA	GTTGACCACA	120
TGATGGTGTT	CCACACTTCC	CCTAGGCTCG	AG			152

(2) INFORMATION FOR SEQ ID NO:1209:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 317 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1209:

GAATTCGGCC	TTCATGGCCT	ACTACCCCTT	TATCATTCAC	TAACGTGAAT	GTGGTGCTAA	60
TTTTTCCAGT	CCATATCTTT	GAAGTTTGTG	TAATATATGC	ACATCAATAA	GCAATCGAGT	120
TTTATCTATT	CTAATTGTTT	TAATGTACAA	CTTTATGGGT	ACATGTGCAA	TTTTGTTTCT	180
TGCATGGTGG	CCAAATCAGG	GCTTTTAGAA	CATCCAACAT	GCGAATAATG	TACATTGTAC	240
CCATTAACTA	ATTTCTCAAT	ACTTCTGAGT	CTTCCTTGTC	TATGATTCCA	CTCTCTACAT	300
CACATGTACA	CCTCGAG					317

(2) INFORMATION FOR SEQ ID NO:1210:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 282 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1210:

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GACAGATTTC ATTACCTTGA AGTTCACCTGC ACTGAACAAT TCTCACTCTG GATGTATTCC      60
TGCTCTAGGA TGTGAATTGA GACTTTTGTA ATAGAGTGGG CTTTGAGAAA TAGCTTTTCT      120
GCTCATTTTA GTTTCATGAT GACTGCGATGG AATGTTTTGC TTCACGCTTA TGCATTGAGT      180
TTTATCAAGC ATTAAGCAGT TGGCCGAAAC AGGTAATACT TGAACATTCA GTCCAAGAAA      240
AACAAAATGG ATTTGAACAT ACGTAGAATC AGTAAACTCG AG                                282

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(2) INFORMATION FOR SEQ ID NO:1211:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 482 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1211:

```

GAATTCGGCC TTCATGGCCT AGTCAAACCC TAGAGCAATG CAGGCCTTGT TACAGATTCA      60
GCAGGGTTTA CAGACATTAG CAACGGAAGC CCCGGGGCTC ATCCAGGGGT TACTCCTGG      120
CTTGGGGGCA TTAGGAAGCA CTGGAGGCTC TTCGGGAACCT AATGGATCTA ACGCCACACC      180
TAGTGAAAAC ACAAGTCCCA CAGCAGGAAC CACTGAACCT GGACATCAGC AGTTTATTCA      240
GCAGATGCTT CAGGCTCTTG CTGGAGTAAA TCCTCAGCTA CAGAATCCAG AAGTCAGATT      300
TCAGCAACAA CTGGAACAAC TCAGTGCAAT GGGATTTTGG AACCGTGAAG CAAACTTGCA      360
AGCTCTAATA GCAACAGGAG GTGATATCAA TGCAGCTATT GAAAGGTTAC TGGGCTCCCA      420
GCCATCATAG CAGCATTTCT GTATCTTGAA AAAATGTAAT TTATTTTGA TAACGGCTCG      480
AG                                482

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(2) INFORMATION FOR SEQ ID NO:1212:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 343 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1212:

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GAATTCGGCC TTCATGGCCT AGGGTGATAT TTAACCTGTT GCCAATGGCT AAGCTCCAGA      60
CTTTGCCTCT CACACTTGGA GGGATTCCCT GCCACCATAA ATCTCGAACT TTTCTAGAGC      120
ACCACATTGT TTCCAGTTA GGTAAGATCT CATTATTCCA GGTGAGCACA GCGTTTCCAA      180
TGCTTTCCTC GACTCTGCAT CTTCTTTCCA GCTGCTTCTT CCTTCGCTGG GCTTCTTTCA      240
GCTCTCGCTT TTTGGCCTGA ACCACCATT CTTCATACTG CTGTCTGTGC TTCTGAGCTT      300
CTTCAGCTGG TTTTGCTGGG AGATTGCTG GTCTGTCTC GAG                                343

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(2) INFORMATION FOR SEQ ID NO:1213:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 285 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1213:

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GAATTCGGCC TTCATGGCCT AGAGAACTA AAACCTCAGAG AAGTTAATTA CTGAACTCAA      60
GATCCCAAAG TGCTGGGATT GCAGGCGTGA GCCACCGCGC CTGGCTGAAA GAGCTTTTTT      120
AATGTATTAT TTATTTGTGT CAGGATAGAC TCATTGATGC GTGTTTTATT CAGTGGGTTA      180
TAATTCCTTA TTATGTATTC TGATGTTGGT GTTTCCCAG TTTTAGCCAA TGGCATCCCC      240
TTCCATCTGG ATCCTGTGTT CTTTGTGACAT GGCTCCAATC TCGAG                      285

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(2) INFORMATION FOR SEQ ID NO:1214:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 320 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1214:

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GAATTCGGCC TTCATGGCCT AGAACCAGGC CTTCCAGTAC GAGTTTGGAG CCATGTATGC      60
ATGGATGCTG TGTGTCTTCA CTGTCACTCGT GGCCTACAGC ATCACTTGTC CCATCATCGC      120
GCCATTTGGC CTCATCTACA TCCTGCTCAA GCACATGGTG GACCGGCACA ACCTCTACTT      180
CGTCTACCTC CCAGCCAAGC TGGAGAAGGG GATCCACTTT GCCGCTGTGA ACCAGGCCCT      240
GGCAGCCCCC ATCCTGTGCC TCTTCTGGCT CTAATTCTTT TCCTTCCTGC GCCTGGGTAT      300
GAAGGCCCCC GTCACTCGAG                      320

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(2) INFORMATION FOR SEQ ID NO:1215:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 446 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1215:

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GAATTCGGCC TTCATTTTGA AAGATATTTT TGTAATAATC TGTGTTGTTT CTTTTAATAC      60
TTTCCAGTGT TATCTGGGTT TCTTAATTTT TGACTTAAGG TCTGTAATAA TTTCTGCTTT      120
CATTCCTCTT AATATATTGT GTCTTTCTTT GTCTACATTT AAGATTTTAT CTTTATCACC      180
TGTTTTGAAA AGTTTTATTT TGATGTGCTC TTTATGTTTT TCTTTATTG TAGTGCTTGG      240
ACCTTGTTGGT GCTTTTCTTA TTTATAATTT TCATCAAATT TGGGGGGTTT GACCATTATT      300
GCTTCAAAAA TAATCTCTGT TCTCTTTCTT CACTTTCTCC AGTTACATAC TGTAAGTAA      360
ATGATAGCTA CCGAAGACAG AGTGATCCGT GATAAATATC ATTAATGCCT CTGAAGAGGA      420
GAATGACTCC AGTGGAACCA CTCGAG                      446

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(2) INFORMATION FOR SEQ ID NO:1216:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 263 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1216:

GGACTTTT	TG	GAGAAGCAGT	ACTATTCATT	AATTAAGTAT	AGAGTGTCTT	GTAAATCCTA	60
AAAGAAAG	GAG	AGCCTTAATG	AGGATCATGA	ATTTTTTTT	TTTTTTTTT	TTTGGGATG	120
GAGTTTCG	CT	CTTGTCGCCT	AGGCTGGAGT	GGGGTGCTAT	CTCTGCTCAC	CACAACCTCA	180
GCTTCCTGG	G	TTCAAGCGAT	TCTCCTGCCT	CTGTCTCCCG	AGTAGCTGGG	ATTACAGACA	240
TACGCCGCCA		TGCCCAACTC	GAG				263

(2) INFORMATION FOR SEQ ID NO:1217:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 325 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1217:

GAATTCGGCC		TTCATGGCCT	AAACAACAAC	AATAACAACA	ACAAAAACAT	GTATAACTGG	60
GAAAAAAGT	G	AAAGAGAATG	CAGGATCATA	AAAATATAGC	AAACAAAGTG	AGTGGGATTT	120
AAAATTAGTG		GAATAAGAAA	TAATGGGTAA	CAATGAAGAA	CATAATTTAG	GTAAATAGTAT	180
AGTATCTTGG		GAGCCCTCCT	GGAAGTATCT	AGTTATGGAC	AGTGAGCAGC	AGAAACAGGA	240
TGTAACCTCA	A	TTCAGCATA	TTGATGGTTG	TGGTAACCCT	AGAAAATGAC	TCCAGGAAAT	300
AGGTGAGAAT		CCAATCTATC	TCGAG				325

(2) INFORMATION FOR SEQ ID NO:1218:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 293 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1218:

GAATTCGGCC		TTCATGGCCT	ACAGAGATAG	GGTCCCATCC	AGGTTCTTAA	CTGGGTGGCA	60
CATGCATGGG		CTAGATCCAA	ATAGCATTGC	AAAGGCCTGG	AAAACAGAAC	TAGAATTGAA	120
ACCACCGCGG		AAGACTCATT	CGAACTCGTG	GGCTGAAGTC	AACCAGGTCA	ATGCTTCAGA	180
AAAATACCAG		CATTCTCCAC	AGGACATAAA	CAAGATTGTC	TCATAACATA	CCATTCAAAA	240
TATTAGGATA		CAATCAAAA	TTGCTCATCA	TAAGAAGACA	GGAAAAACTC	GAG	293

(2) INFORMATION FOR SEQ ID NO:1219:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 265 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double

(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1219:

GAATTCGGCC	TTCATGGCCT	ACGAGGATTG	GGGTAGGTAT	GNGCTTTNGG	CTCATGTTTG	60
TGATGATAAC	TGAAGTCTNT	TGTGGGTCCG	ACCTGTTGTA	GGGTGTGGGG	GAAAGTGAAG	120
GAAGAGAATG	AAGGTGAGTC	CCCGCCGTTG	CAAACCTTCA	CCAAACCACG	CGGCCAGTT	180
TTCGTGAGTA	CCCCTGTGTC	CCAGAGAGGA	GGACCCAGCG	TCCTCGGCTC	TGCCGAGGC	240
CTTCTTGGTC	TGGTGGGTAC	TCGAG				265

(2) INFORMATION FOR SEQ ID NO:1220:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 266 base pairs

(B) TYPE: nucleic acid

(C) STRANDEDNESS: double

(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1220:

GAATTCGGCC	TTCATGGCCT	AAGGAATTGA	AACCCAGTAC	TTTGCAGAAC	TTCTTATGAC	60
TTCTGGAGTG	GTCCTCTGTG	AAGGGGTCAA	ATGGTTGTCA	TTTCATAGCG	GTTACGACTT	120
TGGCTACTTA	ATCAAAATCC	TAACCAACTC	TAACCTGCCT	GAAGAAGAAC	TTGACTTCTT	180
TGAGATCCTT	CGATTGTTTT	TTCTGTTCAT	TTATGATGTG	AAGTACCTCA	TGAAGAGCTG	240
CAAAAATCTC	AAAGGGGGAT	CTCGAG				266

(2) INFORMATION FOR SEQ ID NO:1221:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 312 base pairs

(B) TYPE: nucleic acid

(C) STRANDEDNESS: double

(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1221:

GAATTCGGCC	TTCATGGCCT	AGCTCATTCT	GCTGGGGGTA	GAGATGAGGG	GAGGGAGTAA	60
GTAAACCTT	GGACTAGCAA	GTAAGAAGCCT	GGGGGGATGC	GTGTGCCTCA	GTTTCCTCCT	120
CCACAACTGA	ATATAGTGGC	TGAAAACTGG	GGAGATACTT	GATGGCGCGA	ATGTCCGTTT	180
TCTCTCCCTT	CCCACCTCCT	GCAGGAAGCA	GGACGGGGCA	GGCAGCACCT	GGTAGGCACA	240
GTGCTTTGCC	CCTCCTCCCC	TTCCCTTCTG	GAAGTCTTGG	GGCCTCAGTG	CTTGCAACAG	300
CCACTCCTCG	AG					312

(2) INFORMATION FOR SEQ ID NO:1222:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 512 base pairs

(B) TYPE: nucleic acid

(C) STRANDEDNESS: double

(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1222:

GCGATTGAAT	TCTAGACCTG	CTGGCCTCAA	GTGAACCTCC	CGCCTCGGCC	TCCCAACGTG	60
CTGGTATTAC	GGGCATGAGT	CATTGTGCCC	AGTCACAGAA	TTCATTTTAT	TTGTGAAAAT	120
ACAGTGGTAC	AAGTAGGCCT	TTGTTAAATG	ACTAACCTGA	AACCTCTTGT	GAATGACAAA	180
CTCCTCTCTA	CTCCAAATAC	TGGCCCATCC	CTGCTTAAAT	ACTGCTCAAT	GAAGTTACTC	240
ATGCTAGTTC	TTGAGGGAGT	AACTCTAGAA	TGATTCCATC	TAGGAAGACA	TAAGATAAAA	300
TGGTAAGTAT	TCTAAGTTCT	ATAGGTAGTT	TAGTCATGCC	ATATTATAAA	CCTCCACTCC	360
AAAAATAGTG	TGAGGTCATT	TCTGGCCAGA	GTGAAATAAA	AAATGTATAA	TGCCTGAACA	420
GTCTATTATT	CTGACAATGA	AAAAGATTAA	TGCAGTTCCC	TTTATCACTT	GCATGAGTAA	480
AAAAATATAT	ATATATATTG	GCTGGGCTCG	AG			512

(2) INFORMATION FOR SEQ ID NO:1223:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 447 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1223:

GGGTGTTTCA	TACAAAGAAT	ACAAGTAACT	GATGAATGAA	GGGGGCATCT	TGTGTCCCCA	60
CAATCCTGCT	GTGCGCACAC	CACAGGTGAG	CCGTTCTGCC	TAAGGGAACA	GCCCCGGCCC	120
CTCCCTCCGG	CTCCTCCCCA	GCACCGTCTC	CTCCACCCAG	TGGCCTGGCC	GTGGATGCTG	180
CCTGTGGCCC	AGCTTTGAGA	CACCGCCCTG	ACACGTGTCC	AGCCTTACGT	GGAAGGATTT	240
GTCTGTTTTG	TGGCATCCTA	GTAGATGCCA	CGTTAGTAGA	TGCCATGTTA	GTAGAAGGGA	300
TGTGGGCATT	TCTTTGTAAG	TTCCCAAAG	CCTATGAGGG	TTTTTTCCAC	GATTCCGTTT	360
CCAGTTTGGC	TTTTGTGTGT	GTTGTGGCTG	TTCTTGGCCC	CCCTGGGCCC	TGCAGTGGAG	420
TGGGGGGCTG	CACCTGGGAG	CCTCGAG				447

(2) INFORMATION FOR SEQ ID NO:1224:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 235 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1224:

GAATTCGGCC	TTTCATGGCCT	ACTTTGTTTT	ATATAATAAA	GTATGCCTGT	TATATTAAAT	60
AATAAGAATA	TGGCAATTAG	CGATATAGCA	TACCCAAACA	AAGATGTTCT	CGATACAGTC	120
TGGCAAAGAC	TATCCAAGG	TTATTTTAAT	GAATTCAGAC	ATTTTTTCCT	GTGGATATTT	180
CTCCATCCTA	AAAAAAGTGG	CAACCAAGGA	AAATATTTAG	ATGCAAATAC	TCGAG	235

(2) INFORMATION FOR SEQ ID NO:1225:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 134 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1225:

GCGATTGAAT TCTAGACCTG CCTCGAGACT GACGCCGCAC CATGACCCTC CTGCTGCTGC	60
CCCTTCTGCT GGCCTCTCTG CTCGCGTCCT GCTCCTGTAA CAAAGCCAAC AAGCACAAGC	120
CACCGCATCT CGAG	134

(2) INFORMATION FOR SEQ ID NO:1226:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 556 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1226:

GAATTCGGCC TTCATGGCCT ACACACATCT GGTAAGCAGA AGCACGGAAG GCCTTTGTTT	60
CAGACAATCT TTAAATGAT GTTTGTATAG GGAACAGCTT TGGAAAGATAA AGAATGTCTC	120
TCTCTCTTAT GGTTTGAATG TGTCTCCAAC ACTTATGTG TTGAGACTTC ATCCCAGTG	180
TAACAGTATT GGAAGTGGA GCCTTTAAGA GCTAATTAGG TCATGAGGAC AGCTCGCTCA	240
TGAGTTGACT AAAGCTGATA ATGTGGGAAC GTGTTGGTTA TCACAGGAGT GAGTTCCTGA	300
TAAAAAGAAT GAGTTTGCC AGATTGTCTC TGTCTGTCTC ATCTGCCTGC TTCCACCTTC	360
TGTACTTCCA CCTGGAATGA CCCTCACCGG ATGCTGGTGC CATGCTCTTG GACTCCCAG	420
CATCCAGAAC TTCTGTTTTT ATAAATTACC CAGTCTATGG CATTCTGTGA TAGCAGCAGA	480
AAATGGACAG AGACACCCTC AAATTAAAGG ACAGTCTTGC TGACTATGAA TTAGAAAATA	540
TCTGGGTTAG CTCGAG	556

(2) INFORMATION FOR SEQ ID NO:1227:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 175 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1227:

GAATTCGGCC TTCATGGCCT ACCTGCCTCG AAATACTACC GTATGGCCCA CCATAATTAC	60
CCCCATACTC CTTACACTAT TCCTCATCAC CCAACTAAAA ATATTAAACA CAACTACCA	120
CCTACTTCCC TCACCAAAGC CCATAAAAAT AAAAAATTAT AACAAACCAC TCGAG	175

(2) INFORMATION FOR SEQ ID NO:1228:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 220 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1228:

GAATTCGGCC TTCATGGCCT ACTGTTTCCT TGCCCTTTTC ACCGTCTGGT GGTTCCTGC	60
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AGCCCTTGGC TTGTGGCCCT CTCATCCATC TTCCGAGCCT AGCACTCCAG TCTCTGCTTC 120
 TGTCAATCACA TCGCCTTCTC TTGAGAAAGA TCCCAGGCTG GTATTAAAT TGCCTGTTGG 180
 CAGGAACCTT GCCTGTCTTC CCCTACCCCC ACAGCTCGAG 220

(2) INFORMATION FOR SEQ ID NO:1229:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 526 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1229:

GAATTCGGCC TTCATGGCCT AAGTCTCTTG ACATCTCAAT TTACCCAGAG ACATCTCTAT 60
 TTAATTATTC CCTGAGGAGG GGAAGTTGGG TATGGCGGTT GGAGGTGGAC AGGCTCCTAA 120
 CAAGCACTTG CCAGCAGGGG GCACTCCAG TTTTCGCTCC GCTGAGTCAC CCAACCCCTG 180
 AGGCTTCGCC ACTTTCTAAT GTTTGCTGTG GCTACAATGG TCAGACCCAC AGGCAAAAAA 240
 GTCGAAGTCC CTGGAGTCCC TGACCCTCT TCCTCTCTAT AACGATTGGA AACTGTCCAA 300
 ACCAACTCCA GTAGTTCTGG GCTGATGAAT CATCTCTTG TGGGGCGGAG AGTGGGGGTA 360
 GGGTGGAGCA ATGTGGGCTA GGACCCAGGG CAGGATCAAA ATCTCTGAAG ATGCAGAGCT 420
 CCCTCTGCCC TGGGAAGAAG GAAGCAGGAT TTATTATAAC ATTTAGCTCA CTGTCCAATC 480
 GACTAAACA AGCTCTCCCA GGGCTCGGGC CAACTGTCGA CTCGAG 526

(2) INFORMATION FOR SEQ ID NO:1230:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 312 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1230:

GAATTCGGCC TTCATGGCCT ACCATTGGGC TATGACCTGA GGAGAATCAA GGTAGCTTTC 60
 TCAGGCCTCG TGGACATCGT GGATATAAGG AATGCTCTCG TAGGAGGGTA CAAGAACCCC 120
 AGCATGATTC CAATAGAGAA GGCCAGGGG CCCATCCTGC TCATNGTTGG TCAGGATGAC 180
 CATAACTGGA GAAGTGAGTT GTATGCCCAA ACAGTCTCTG AACGGTTACA GGCCCATGGA 240
 AAGGAAAAAC CCCAGATCAT CTGTTACCCT GGGACTGGGC ATTACATCGA GCCTCCTTAC 300
 TTCCCCCTCG AG 312

(2) INFORMATION FOR SEQ ID NO:1231:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 297 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1231:

GAATTCGGCC TTCATGGCCT AGCTTTATCC ACTCTGGAAT CCTGGAGGAG CCGCTACAAC 60
 CAAGTTGTAA AAGAAAAGGG AGACCTTGAG NTGGAAATTA TTGTCCTGAA TGACCGGGTA 120

ACAGATCTTG	TAAACCAACA	ACAAACCCTG	GAGGAGAAGA	TGCGGGAAGA	CCGGGATAGC	180
CTGGTGGAGA	GACTACACCG	TCAGACTGCT	GAGTATTCCG	CATTCAAGCT	GGAGAATGAG	240
AGGCTGAAGG	CCAGCTTTGC	TCCAATGGAG	GACAAACTCA	ACCAGGCACA	CCTCGAG	297

(2) INFORMATION FOR SEQ ID NO:1232:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 360 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1232:

GAATTCGGCC	TTCATGGCCT	ACGCAGCTCT	ACCTGCTCCA	GGGGCACCTG	GACCTGTGTG	60
AGCAGCACTG	TGCCATCCTC	CTGCAGACTG	AGCAGAACCA	TGAGACCGCT	TCTGTGAAGT	120
GGAAACTTG	AAGACATTCC	TGCCTTCTTT	GAATTGGCCA	AGAAGGTGTC	TAGCCGGGTG	180
CCTTTGGAAC	CAGGGTTCAA	TTACTGCAGA	GGTATCTACT	GCTGGCACAT	AGGGCAGCCC	240
AACGAAGCCT	TAAAGTTTCT	GAACAAGGCA	CGCAAGGACA	GCACTTGGGG	CCAGAGCGCC	300
ATCTACCACA	TGGTGCAGAT	CTGTCTGAAT	CCAGACAACG	AGGTTATGGT	GCGGCTCGAG	360

(2) INFORMATION FOR SEQ ID NO:1233:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 423 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1233:

GAATTCGGCC	TTCATGGCCT	AGAAGGACTG	AAATGATGTT	ATACTAAGGG	CTACTGAACT	60
TTTTGCCTGT	TCTTTCCAGG	TGTGACAGCC	TTTCTTTTTC	TTTCCAGGTG	GTTTCGCTTG	120
AGGTGGTCTG	AAGCCAAGGC	CTCGCGGAGC	TTCTTTGTGT	GTCACTTGC	TTCCACGTTT	180
CAGTTCTTGT	TTTGTTTCTA	CTGCTTTAGT	TTTTTTTAAA	GTTCTCCAGT	GTCCCAAGA	240
GGTATTAGAA	TCTTGCTGTA	CCCAAGCAAG	ACGTTAATTT	TTCTTTTAAC	TGTTTGGGG	300
AGGGAGGGAG	TGATAGCTTA	ACTGCTGAAG	CCAGGCGGGG	GTCTGCTGGA	GGATTCCAAC	360
AGAGAGTATT	TCCTCCACTG	TACAATGTCA	CAGACTATCT	CTATCATCAT	TGCTTTGTGG	420
CAT						423

(2) INFORMATION FOR SEQ ID NO:1234:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 475 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1234:

GAATTCGGCC	TTCATGGCCT	AGCATGTAAA	ACTTCAGTCC	TGAACATTTA	TAGGGTTTTA	60
TAGAAGGGCA	TCCTCCAGGG	CTGGTCCATT	CAGAGAAATG	CTGCATGCTG	CCGTCATGGA	120
ATGTGGCCCA	CAGGACACCA	GAGCCGTGAG	AACCGGAGAG	CAGACTTCCC	TCACGGCTGG	180

GCTGAGCAAA	CCCTCCAAAG	CCCTCCTCAC	GCAGTTACTA	ACAATAGCAT	GGGCTTACAG	240
CACAAGCACG	TGTTCTCACC	TTTTTCCTAT	GCCCTGGACT	AAGGTTTGGC	CAGTGTAATC	300
ATATAAGGCC	ATCCTGACAT	TGTTTCTGTG	TTTCAAAT	TGGATTTT	TTTACATTAG	360
AACTACATTG	CTCCTAGTAG	AACATTACCT	TTAGGGGACT	AATTTTCCAT	GGAGAACTAT	420
TTCAGCATAT	TGCATGCTGC	TCAGACCCCA	AGTCAGATAT	GCCCACAAGC	TCGAG	475

(2) INFORMATION FOR SEQ ID NO:1235:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 301 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1235:

GTTTTGAGCC	TAGTAGCACT	ACCTTCCAAG	TGAGTCACAA	CAAATTTGAT	CCTATTG	60
ATGTTTTTGT	CCACTGTTAT	GATTNATCAT	GTATCTTACA	AGAGCCACTC	AAGCAAGACT	120
CTGCTTCTAT	GTATGGTGAG	GCCTNGTTGT	TCTAGGCTAG	AATAAACTCT	TTGTATGCCT	180
CATTGAATAT	GCCAGGTAA	ATTTATGCAG	TCAAGAATGA	ATTATTTTC	TGACTAAAGT	240
GTGTAGCAGT	AGTTCAAAAT	TGTGCCCTTG	TTTAAACAGT	TTCTGTCNAC	ACCTTCTCGA	300
G						301

(2) INFORMATION FOR SEQ ID NO:1236:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 346 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1236:

GAATTCGGCC	TTCATGGCCT	AAGAGAAGAT	AACATTTACA	AGTAAACAGT	AAGTGCAATT	60
GTATTTTAAT	TTCTTGGTCT	CCGAAACTC	AGCTGTGACT	GCTTTCCATT	AACAGTTCCA	120
GCTCTATGTG	TTTCCTCTAA	CGCTAAAGGC	ACAGCCCCCG	GGAATCTACT	GCTTCCTAAG	180
AGTCTCCATG	GAGTCTATTT	TACAACCTCC	TTCCCTCCA	TGCTTCCGCG	GAGGAGTCTA	240
TACTATCTCT	ATATACACAT	TTTAAACATT	ATTCTTTCATT	TGAAATTCCT	TCAATAAAAA	300
CACAGTCACC	ATTCTTCATC	TTCTTGGGAA	ATGGCCTGCT	CTCGAG		346

(2) INFORMATION FOR SEQ ID NO:1237:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 355 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1237:

GAATTCGGCC	TTCATGGCCT	ACTCACTATG	TTGCTCAGGC	GGATGTGGAA	CTCCTGGGCT	60
CAAGCGATTG	TCCTGCCTTG	GCCCCCAAAG	TGCTGGGATT	ACAGGTGTGA	GTCATGGCAG	120
CCACGGCTCC	AGAGCTCGGG	TTCTTAATCT	GGTCTGTGGA	TGGCCCCCTGG	GGGCGGTCCC	180

ATGAGCCCCT	CACAATTGGA	CACAGTTTGT	CAAAGGGGTA	AAAGGACAAG	AATCGGTAGC	240
TGTGACTGTG	GATGAGCCTC	TGAGCTTCAC	TTTCCCTCCC	TGAAAGGGGG	TGACAGTGGC	300
ACCTCCCTGG	AGGTTTTCGT	GGAGGGGAGG	AAACACATGT	AAAATACTTC	ACCCC	355

(2) INFORMATION FOR SEQ ID NO:1238:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 560 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1238:

GAATTCGGCC	AAAGAGGCCT	ACTAGACCTG	ATCACCACGT	TCAAAAGTTG	GCTTCTCCA	60
TTTAAAGTTC	TTCCTTAAAG	CCTCTTTAAG	CAAAGTCCCT	GAAATGATAC	AGTAGAAAAA	120
TCACACAGAC	TTATTAAAAA	TGAATTCTAT	CACTATTCCT	GAGATCTCGC	CTGCCCCACT	180
GAGGACATTT	TGTTTTCGCA	AAGTGCTTTG	AAATGTGATA	AAGGATCTTA	AAGAATATTT	240
GTAATAATTAT	GCCCAAAGAA	GACATTCTTT	GAGGTAACT	TGCAGTGTCT	AAAAGTCAAG	300
AATGAGGAAG	GAAAGGAAAA	TAACAGATTC	ACTTTAAAAT	GGACCACGCT	AATTGGGCAG	360
TGAAACATCC	TTGTGTCACA	CCATTTACCG	TAGCAGACCA	GAAGAGGGAA	AAGGCTTGAT	420
TTTTCTCTCA	TAGATACCAC	AGTTCACCT	CAAAAACATT	CCTAAAATGG	ATTGATATTT	480
CTCTGATAGA	GCACCTGTTT	TGCTACTGAC	AGTGTTAAGT	TCCATACTAA	TCAGCTCATC	540
TAGCCTAACG	ACAACTCGAG					560

(2) INFORMATION FOR SEQ ID NO:1239:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 569 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1239:

GAATTCGGNC	AAAGAGGCCT	AAGGAGAANG	AGGCTCAGAA	GGAGACGATT	AAGGATCTTC	60
CCAAGATGAA	CCAGGAGCAG	TTCATTGAGC	TGTGCAAGAC	GCTTTACAAC	ATGTTTCAGTG	120
ANGACCCCAT	GGAGCAGGAC	CTGTACCACG	CCATCGCCAC	CGTGGCCAGC	CTCCTGCTCC	180
GCATCGGAGA	GGTGGGGAAG	AAGTTCTCAG	CCCGCACAGG	CAGGAAGCCC	AGGGACTGTG	240
CCACTGAGGA	GGACGAGCCA	CCAGCACCCG	AACTGCATCA	GGACGCAGCC	AGGGAGCTTC	300
AGCCCCCAGC	TGCAGGAGAC	CCCCAAGCCA	AAGCAGGCGG	AGACACACAC	CTCGGAACAG	360
CCCCACAGGA	GAGCCAGGTG	GTGGTGAGAG	GGGGCAGCGG	CGAGGGACAG	GGCTCACCCCT	420
CCCAGCTGCT	GTCTGACGAT	GAAACCAAAG	ACGACATGTC	CATGTCCTCC	TACTCGGTGG	480
TCAGCACGGG	CTCCCTGCAA	TGTGAAGACC	TTGCAGACGA	CACGGTGCTG	GTGGGCGGGG	540
AGGCCTGCAG	CCCCACAGCG	CGACTCGAG				569

(2) INFORMATION FOR SEQ ID NO:1240:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 405 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1240:

GAATTCGGCC AAAGAGGCCT AGAGACCAGC CTGGCCAATA CGGTGAAACC CTGTCGCTAC	60
TAAAAATACA AAAATTAGCC AGGCATGGTG GCTCACACCT GCAGTCCTAG CTACTTGGGA	120
GGGTGAGGCA GGAGAATCAC TGAAGCTTGG GAGGCAGAGG TTGCAGTGAG CCAAGATTCC	180
ACCGCTTCCC TCCAGCCTGG ATGACAGAGT GAGACTCCGT CTCAAAAAAA CAAAAAAA	240
GTTACTTCAA TAATGTACTT TTTTTTTTCA AATTACAGAT AATCTATAAG GAATTAATCT	300
TGAAATTAAT TCCAGGTTTA ATTGTTAATG AAATTTTACA AGCCTAATT AACACTTGTC	360
TGGATAACTC ATTTTGATAC TGAGTAAATA GTCACCGGTC TCGAG	405

(2) INFORMATION FOR SEQ ID NO:1241:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 542 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1241:

GAATTCGGCC AAAGAGGCCT AGGGCTTTTG TGAATAAATT TTAAAAGAGA CTACTGCCTG	60
TCCTTAAATT CCTTTTCTT TTTATAAAAA AAGAACTATT AAAAATGATT GACAAATTTT	120
GAGTTAAAAA ATTGTTAAAA CATTCTCTAT ATTTAATTC AATTTTATAA TAGATTACAG	180
GAAGATGCTT ATGAAACAAA TACATTTGTT TCAGTACATG TCTTTAAATG ATAGACTTAT	240
AAGTATGTAA ACAACTATAT AATAAAAGGT TTCCAAACGC TGCCTGTAAG AAATCAGGCA	300
AATTTTACCA TAAGCAATAA ACCATTCCAA GCCTTCCAGA CAGTCTCCAT AGCCGCACCA	360
GCATGGCAAT AAGCTTTTAA CAAACGAAAA CAAACAAACA AAAGCACTTC GCAATTTGTT	420
GCTGCAAAAC AGGGAGAGAA AAGAGTGATG AAACCTTGATG GAATCACAAC AGTCAATATA	480
ATTTAAGGGA CAATAAGTC AATAAGGTTG ATGTTGTTTA TTGTTTAAAA AGTTAGGCCT	540
CT	542

(2) INFORMATION FOR SEQ ID NO:1242:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 370 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1242:

GAATTCGGCC AAAGAGGCCT ACTGATACAA TTGTTGACTT TTCTTTTACT ATGTGTAAGA	60
AATACCCCAA ACATGAAAAG ATTGTTTGA TCATATGCAT GTATGTAGAA TATTTTGGCA	120
GAGCAGAAAG ATTATGTTAG AAGTGTGATT TTTATTTTCA GAAGTCATAT ACATGTAAGC	180
TACAATTTTG AGTGCTTTAT AAACACTTAA GATATATATA TAAATTTTAA TTTCATAGCA	240
ACTTGTAATAA AATAAAATAC TTGTTGAAAA GCCTTTTTC AATATCCCT AAGCTAAGGG	300
AAGAGGAAGG AATAACAAC CAGTGAAAAG ATGGTCTCCA GTTTCTGAAT GAAAAAGCTA	360
CAACCTCGAG	370

(2) INFORMATION FOR SEQ ID NO:1243:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 374 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double

(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1243:

GAATTCGGCC	AAAGAGGCCT	AGCCTCATCA	CGGGCAGGGC	TCTGGCCCAT	AGTGGCTGGA	60
CAGACACTGG	CACAGTCTTG	CTGGTCTGCT	GGGAGCACAC	AGACATTGGC	ACAGACTTGC	120
TGGTCTCTTG	GAAGAGGGCA	AGACCCCAA	CCAGAGCAAA	ATACACTTCC	AGCTCTTAAC	180
CAGGCTCCTT	CCAGTCACAA	GTGTGCAGAA	TCAGAACAGA	AGTAGTACCA	ATCAATGTCA	240
CATGAACAAA	CAAGCTGCCC	CCAGGGTACC	ATTTGGGGAG	GGGAAATCTT	TTCTTTCTTT	300
CCCCCTTAAA	AAAAAACACA	TCTGCCCCGA	ACACTTTCCC	ACTGTTATTC	TTTCTCATA	360
CCCCAACGCT	CGAG					374

(2) INFORMATION FOR SEQ ID NO:1244:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 468 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1244:

GAATTCGGCC	AAAGAGGCCT	ACACACCAAA	CTGATTATCC	ACCAGACACT	CAGCGTCTTA	60
GAAGATATTG	TGGAGAATAT	CTCGGGGGAG	TCCACCAAGT	CTCGACAGAT	TTGCTACCAG	120
TCGCTGCAGG	AATCTGTTCA	GGTCTCCCTG	GCCCTCTTTC	CAGCTTTTAT	CCATCAGTCA	180
GATGTGACTG	ATGAGATGCT	GAGCTTCTTC	CTCACTCTGT	TTCGAGGCCT	TAGAGTACAG	240
ATGGGTGTGC	CTTTCACCTGA	GCAAATCATA	CAGACTTTCC	TCAACATGTT	TACCAGAGAG	300
CAGTTAGCCG	AGAGCATCCT	CCACGAGGGC	AGCACAGGCT	GCCGGGTGGT	GGAGAAGTTT	360
CTGAAGATCC	TGCAGGTGGT	GGTCCAGGAG	CCAGGCCAGG	TGTTCAAGCC	CTTCCTCCCC	420
AGCATCATCG	CCCTGTGCAT	GGAGCAAGTG	TATCCCATTT	CGCTCGAG		468

(2) INFORMATION FOR SEQ ID NO:1245:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 444 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1245:

GAATTCGGCC	AAAGAGGCCT	AAGCTTATGG	GGAGGACACA	TATTTACTCA	AACATCCTGG	60
CAATTCATAT	CTAGGGCACT	CCCTCTGTGT	GTCAGACGCC	CTTGCATGTG	TCAAATGTCA	120
TCTGATAACA	TTGATGAAAA	ATATCATTCA	CTTCTTCTTG	GTGCAGAAGG	CATAGACCGG	180
ATTATGCAAT	CACTGAGAAG	TAGCTTCTGG	ATGTGTTTTT	TGGTGGCGTC	TTAACAATTT	240
CAGCCGACTG	AAGGCTCTTG	GACACTTGGG	ACATTTGTAG	GGTTTCTCTC	CGGAGTGGAT	300
GCGCTGGTGC	TCCTTCAGGC	TCCCCCTGTA	GGTGAAACT	TTCTTGCACT	CTTTACATTC	360
GAAGGGCTTC	TCCCCCTGTG	TGGCTTCTCT	TGTGACACTT	CAAGTAGGAC	TTCTGGGTGA	420
ACTGCTTAGG	CCTCTTTGGC	CGAG				444

(2) INFORMATION FOR SEQ ID NO:1246:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 431 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1246:

GAATTCGGCC AAAGAGGCCT AGTATTTTGT ACTAGTTTTT TAATAATTAT AAGTCTTACA	60
CGTTCTCTAA TTCTTCTTGA ATCTGTTTAA TTTTCTCCCT TTGGGAATTG TTAAGTGATC	120
ATGTATTGTG ATAACGCTA TAATTTTGCT TTTATGATT TTTTGTGCTT TATATCTGCT	180
ACAATTTGGT TCCTCCAAAT CCCATGTTGA AATCTGATCC CCAGTGTTGC TGGGGGATCT	240
AATAGCAGGT GTTTGGGTCA TGGGAACAGG TCCCTCATGA ATGAATTAAT GCCCTCACTG	300
GGAGGAGGGG ATAAGTAAGC TCTCACTCAT TTAGTCCCA AGACAGCTGG TTGTTTAAAA	360
GAGCCTAGTG CCACTTCTCT CTTGCTTCCT TTCTTGCCGT GTGATCTCTG CACATGCCAG	420
CTCCCTCGA G	431

(2) INFORMATION FOR SEQ ID NO:1247:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 389 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1247:

GAATTCGGCC AAAGAGGCCT ATTTT TTTT TTTT TTTT TCNGGGTGTA	60
GAACATTTAT TTATTTTCC CACAAATCAC TGAAAGTTTA GGTCAGTGGG AAATAATTTT	120
AATCAAATAA TTGTACATAT TCTTCCACA TATCCTGCCT TGTATTAGGA AATGACATTG	180
TGATCCATT CATTACAAGT AAAATATTAC AAAATATTTA CAGGAAAATA TTAAAAATAA	240
CTCAAACACA AAAGGCAAGA TGAAATAAAC TGTTTTTTT TCTCCAGAAA TCTCTACTCC	300
AGTGCCCA GACACAAGA GTCAAAACAA ATAAGCAACT AAGATCCCCC GATCACAAT	360
TTCAAAGAA CTAGGCCTCT TTGGCCGAA	389

(2) INFORMATION FOR SEQ ID NO:1248:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 380 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1248:

GAATTCGGCC AAAGAGGCCT AAAGGAAGGC CACTTCTCAA CTGGCAGAAC TCTGAAGTT	60
TAGAATTGGA ATTACTTCCT TACTAGTGTC TTTTGGCTTA AATTTGTCT TTTGAAGTTG	120
AATGCTTAAT CCGGGAAAG AGGAACAGGA GTGCCAGACT CCTGGTCTTT CCAGTTTAGA	180
AAAGGCTCTG TGCCAAGGAG GGACCACAGG AGCTGGGACC TGCTTGTCTT TGTCTTTTCC	240
CCTTGGTTTT GTGTTACAAG AGTTGTTGGA GACAGTTTCA GATGATTATT TAATTTGTAA	300
ATATTGTACA AATTTTAATA GCTTAAATTG TATATACAGC CAAATAAAAA CTTGCATTAA	360
CTTAGGCCTC TTTGGCCGAA	380

(2) INFORMATION FOR SEQ ID NO:1249:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 386 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1249:

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GAATTCGGCC AAAGAGGCCT GTTTGTTTG TGA CTAGACT TAAAAATACT AAAATAAGCC      60
AAATAGATGC TAACAATACT AATTTCGACA CAAGATTTGA AAAAAGTACT TCAAGTTTTA      120
TCTCTTATCC CTAGAGAAAG TAAATAAAAA GTGGCTCTTG CAAAAATAAA TGAAAACAAA      180
ACCACCAACA AAAACTAATC ATATAAGATA CTGTTTTTCT TTTTGAATAC TTCAATTGGT      240
CCTATATTAG GATAAGGTTT TGATAGCAAG GACTTCCTAG CTTCTTCCTT TATCTTCCAT      300
TCTCTAGTCA CTTCCGTGTT TTTATCAAAC AAGGCTACGT GTAGGCTTTC CTACAAAGTC      360
AGATTGAATT CTACCACCCT CTCGAG

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(2) INFORMATION FOR SEQ ID NO:1250:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 428 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1250:

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GAATTCGGCC AAAGAGGCCT AACCATGTCT GACCAGATCA TTGGGAGAAT TGATGATATG      60
AGTAGTCGCA TTGATGATCT GGAAAAGAAT ATCGCGGACC TCATGACACA GGCTGGGGTG      120
GAAGAACTGG AAAGTGAAAA CAAGATACCT GCCACGCAA AGAGTTGAAG GTTGCTAATA      180
ATTTATACTG GAATCTGGCA TTTTTCGAAG CCAAGAGAAG ATCGAATGGC TTTTTCAGC      240
TAAGTACTAT GTGTAGACAG GTTTTATATT ATAAAGTATG CATTCTTATC ACCTAGTATA      300
TAGTTAGTTT GTAGAGTGAT TTCCCCCAG TTTCTTGAAC ATGGTATCTT CACATCTTGG      360
ACCTTGGTCA GTTGTGCTAT TCATTATTAA AACTAAAC TTTGGCGGTT TAGGCCTCTT      420
TGGCCGAA

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(2) INFORMATION FOR SEQ ID NO:1251:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 264 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1251:

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GAATTCGGCC AAAGAGGCCT AAGAAAAGTA GTATGAATGA GTTTTCTAC ATATTAAC TA      60
CAATTTATGG TAATTTGTGA AATGTTTTTC CATTTTAAA TGTAAGAGTC TCTATCTCCA      120
CTCACAAGC AACAGGCACT GCTAGGGGTC TTAGGCTAAC ATCTGCCACC CCACAGTCT      180
GCATGGCCCA TAAACAGGTG CAGAGGACCA GAGTTCACCT GTCAGCAGCA CCGCAGAATC      240
CAACTCTAGG CCTCTTTGGC CGAA

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(2) INFORMATION FOR SEQ ID NO:1252:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 436 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1252:

GAATTCGGCC	AAAGAGGCCT	ACTTTTTTTT	TAATTTTCCA	CTTTCTTCTT	AACTTTACTT	60
CTCTTTTGT	CCCCCCCCAT	CTTACAGAAG	TTGAGGCCAA	GGGAGAATGG	TAGGCACAGA	120
AGAAACATGG	CAAACGTCTC	TGTGCTTTCA	AACCAAAGTG	TTCCCCCAA	CCCCAAATTT	180
GTCTAAGCAC	TGGCCAGTCT	GTTGTGGGCA	TTGTTTTCTA	CAACCAAATC	TGGGTTTTTT	240
TCITTCTTCT	TTAAACATAG	AGGTACCACC	ACAAGGGATG	CCCTACTCTC	TCGCAGCTCT	300
TGAAAGCATC	TGTTTGAGGG	AAAGGTCTCT	GGGCAAGCAA	GTGGTTATTT	GGATTGCTTG	360
CTTCCCTTTT	TCCACCTGGG	ACATTGCAAT	CATAAAATAA	CAGTAAATTC	CAAACCTCTA	420
GGCCTCTTTG	GCCGAA					436

(2) INFORMATION FOR SEQ ID NO:1253:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 399 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1253:

GAATTCGGCC	AAAGAGGCCT	AGGGTAGATC	ACTTGATATC	AGGAGTCGAG	GCGGGAAGAT	60
CACTTGACGT	CAGGAGTTCT	AGACTGGCCC	GGCCAACATG	GTGAAACCGC	ATCTCCACTA	120
AAAATACAAA	AATTAGCCTG	GTGTGGTGGT	GGGCACCTGT	AATCCCAGTG	ACTTGGGAGG	180
CTAAGGCAGG	AGAATTTCTT	GAACCCAGGA	GGCAGAGGTT	GCAGTGACCA	GCAAGGTTGC	240
GCCATTGCAC	CCCAGCCTGG	GCGATAAGAG	TGAAAACCTC	ATCTCAAAAA	AAAAAAAAAA	300
AAATTCCTTT	GGGAAGGCCT	TCTACATAAA	AATCTTCAAC	ATGAGACTGG	AAAAAAGGGT	360
ATGGGATCAT	CACCGGACCT	TTGGCTTTTA	CAGCTCGAG			399

(2) INFORMATION FOR SEQ ID NO:1254:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 444 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1254:

GAATTCGGCC	AAAGAGGCCT	ACCCGGTACT	TACTTCTCAA	TCCTAAAGAG	AGAAAACAGG	60
TGTTTGATCA	GTATGTAAAG	ACCAGGGCAG	AGGAAGAACG	CAGGGAAAAG	AAAAATAAAA	120
ATGCAAGCCA	AGGAAGATTT	CAAAAAAATG	ATGGAAGAAG	CAAAATTTAA	TCCAAGAGCA	180
ACTTTTAGTG	AATTTCAGC	CAAGCATGCT	AAAGATTCAA	GATTCAAAGC	AATTGAAAAG	240
ATGAAAGACC	GAGAAGCCTT	GTTTAATGAG	TTGTGGCCG	CTGCTAGGAA	GAAAGAGAAA	300
GAAGATTCTG	AGACCAGAGG	TGAGAAGGTA	AGATGGTTTT	AGTTCCAGTG	GTGTGATTGA	360
TGGGAGTGTG	AATGGGAAAG	GTCTATGCTG	GTGTTATGTT	TCTAACCTTA	TTCATTGGCA	420
TAAATAATAG	GACGTACACT	CGAG				444

(2) INFORMATION FOR SEQ ID NO:1255:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 284 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1255:

GAATTCGGCC	TTCATGGCCT	AAGAAGGACT	ACCCTGCACT	GCTTTCCTTG	GATGAGAATG	60
AACTCGAAGA	GCAGTTTGTG	AAAGGACACG	GTCCAGGGGG	CCAGGCAACC	AACAAAACCA	120
GCAACTGCGT	GGTGNTGAAG	CACATCCCCT	CAGGCATCGT	TGTAAAGTGC	CATCAGACAA	180
GATCAGTTGA	TCAGAACAGA	AAGCTAGCTC	GGAAAATCCT	ACAAGAGAAA	GTAGATGTTT	240
TCTACAATGG	TGAAAACAGT	CCTGTTTACA	AAGACAAACT	CGAG		284

(2) INFORMATION FOR SEQ ID NO:1256:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 691 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1256:

GAATTCGGCC	TTCATGGCCT	AGTGGGAGTT	TGCTAATGTG	AAACCTAATG	ATGTCTGAAA	60
ATGGTCCTGA	TGGGTATTAA	TAGCCATCTG	GAAAAATTTT	ACATCTTCAC	AAATAATCCC	120
AATAATTTAT	ATTGTGAAGA	TATTATCCTG	ATAGTCCTTC	TTTTCCTATA	TTCTTGTCGG	180
CTGTAGGATG	AGAGCAGTAT	GAAGCAAACA	GAAGACATT	TGAAATTAAT	CACAAAATTC	240
CCATTGCTTT	GAAGCCTGCT	ATTATTATAC	TAAGCCTTCT	TATAGCTTTA	AAAATCAAAC	300
AATGCCAAAC	AGTATATCTA	ACATTTTTTA	TTTCCTTTGA	GCCAAACCAA	TTTGGTTTAA	360
ATTTCTCTGC	CTCCGTGAAG	ACAAGCTGGG	CTGGGGAGGA	CGGTGTCTAG	GAGGGATGAC	420
CCCCTCAGC	TCCAGGCAGT	GTTCTGCCGA	GACCCCAAGA	ACTCGGGGTG	TCAGAGGGCA	480
AAGGAACTAC	CTGCCCTTCA	CGGCTGCTGA	CTTCTCAGGG	CTGCAAGCAG	CACAGAATGT	540
TATCCTTACG	TCCTGAGCCG	GTTTAAGTCT	GTGGAAAAGG	AAGCACGGGA	GAAATCCACG	600
TAACCTTTGC	TTTCTTTTAA	AGGGAAGCGG	TTCCGCCGTG	AACTTGGAAC	CCTCAGCTCC	660
GGGTGTTCTC	GGCAGAAGGG	CAGCTCTCGA	G			691

(2) INFORMATION FOR SEQ ID NO:1257:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 383 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1257:

GAATTCGGCC	TTCATGGCCT	AAGCTGATCC	ACGATCAGAG	TGCTCCCAGC	TGCCCCAGCA	60
GCTCCCCGTC	CCCAGGGGAG	GAGCCTGAGG	GGGAAGGGGA	GACAGATCCG	GAGAAGGTGC	120
ATCTCACCTG	GACCAAGGAC	AAGTCGGTGG	CAGAGAAGAA	TAAGGGCCCC	AGTCCTGTCT	180
CCTCTGAGGG	CATCAAGGAC	TTCTTCAGCA	TGAAGCCGGA	GTGGGAGAAC	TTGAACCACT	240

CCAACGTGCG GCGCATGCAC ACGGCCGTGC GGCTGAACGA GGTCAATCGTG AAGAAATCCC 300
 GGGACGCCAA GCTTGTTTTG CTCAACATGC CTGGGCCTCC CCGCAACCGC AATGGTGATG 360
 AAAACTACAT GGAGTTTCTC GAG 383

(2) INFORMATION FOR SEQ ID NO:1258:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 418 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1258:

GAATTCTGAG GGACTAACTA CGACCATGAG ATTGGCAGTG ATTTGCTTTT GCCTATTGG 60
 CATTGCCTCC TCCCTCCCGG TGAAAGTGAC TGATTCTGGC AGCTCAGAGG AGAAGAAGCT 120
 TTACAGCCTG CACCCAGATC CTATAGCCAC ATGGCTGGTG CCTGACCCAT CTCAGAAGCA 180
 GAATCTCCTT GCGCCACAGA ATGCTGTGTC CTCTGAAGAA AAGGATGACT TTAAGCAAGA 240
 AACTCTTCCA AGCAATTCCA ATGAAAGCCA TGACCACATG GACGACGATG ATGACGATGA 300
 TGATGACGAT GGAGACCATG CAGAGAACGA GGATTCTGTG GACTCGGATG AATCTGACGA 360
 ATCTCACCAT TCCGATGAGT CTGATGAGAC CTTCACTGCT AGTACACAAG CAGTCGAG 418

(2) INFORMATION FOR SEQ ID NO:1259:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 189 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1259:

AAAAATTAAA TAATGCTTGA CTTTTTTTTT TTTTCTCTC TTTTGTAGGC AGGTTCTTGC 60
 TCTGTACCC AGGCTGGACT GCAACAGCAT GATCTGGCT CACCTCCGCC TCCCAGGCTC 120
 TGGCAATCCT CCCACCTCAG CTTTCAGAGT GGCAGAGACT ACAGGCTCAT ACCACCGCAC 180
 CCACTCGAG 189

(2) INFORMATION FOR SEQ ID NO:1260:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 278 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1260:

GCGATTGAAT TCTAGCCTTT CCTCCGTTCA AGTAAATTTA GAAATTCCT AAGTTTCTT 60
 TATAACAGGT AGCCTAAATC TATATCATAC TTTTAAATA AAAATCTAGG TGCAAATTTG 120
 TTCTTATGGT TAAGGTAAAC ATGTACACTT CACAAACATT GAGACTTTTG TTTTGTTTTC 180
 TGGGACAAGG TCTTGTTCTG TCTCCAGCT GGAGTGGATA CAAGCATGGC TTGCTTCAGC 240
 CTCAACCTCC CGGACTCAAG CGATCCCCC CCCTCGAG 278

(2) INFORMATION FOR SEQ ID NO:1261:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 265 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1261:

GAATTCGGCC	TTCATGGCCT	ACTCACTGGA	TGCTGGGGGA	GGGCCCCCTCA	GGTGAGCAGC	60
CCACCACTGA	CTTCAGCGTT	GCTGGCTCGG	TTATCAGACT	CTCATCCAAC	ACAAGCTCAC	120
AGGGAAAGCC	GTTCTTGCT	CCTTGTTGAG	GGAGCTACCG	TCATTGCCCT	GAGACCACCA	180
GCCAAGAAAG	TAGGTATGTC	CAGGTAGGGA	ATTCAGAGGG	ACCCAGTGCA	TCCAATTATA	240
CAATTATACC	CAGAAAGTCC	TCGAG				265

(2) INFORMATION FOR SEQ ID NO:1262:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 426 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1262:

GGTCAGTATT	GAAGGTGTT	TTCTGAGCCA	TTGTATGAAG	CTGCTGTTTT	GGCGTCCCTA	60
ATGCAGGGTG	AGATGGTAGT	GTGATTCTTG	TTGTGACATC	TCGTGACTGG	GCAGGACGCT	120
GAATACTGAT	TGCTGCAGAT	GGAGGATGCT	GGATAGACAA	GGTTGGCCTA	CTAAGTGCTG	180
AATCAGTAGC	ATGCGCCGCT	GTCGTAGTGA	TGACTGGAGA	CTGAGCTCTG	GTGGCTGAGA	240
CAGTTGCTAC	CACAGCAGGA	GGGATGGCAT	TGGAGGTGGT	CACAGGTGGC	CGAGACTGGA	300
TTGGTTGGTG	AATGATGTGC	TGTACTGCTG	GCTGAGCAGT	AGCAGCATTT	GGCAGCTGTG	360
AGGTCGGCCT	CAGGACTGTG	GTTACTTTAG	AACTGGACAT	CACAGCAGCA	GCAGCTGCAC	420
CTCGAG						426

(2) INFORMATION FOR SEQ ID NO:1263:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 398 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1263:

GAATTCGGCC	TTCATGGCCT	AGGCCGGTGT	TTATGCACGA	TGGCGTTGAA	AGCTAGTCCA	60
TCTCTCCAGC	TGGTGGTGAA	GTTGTGTACA	TTGACGTTGG	GATAACCTGC	AGTCTTCATC	120
TGGCACCACA	GAAGCAGGGC	ATCCTTGGCT	GACTTCTTCT	CCTTGTTGTC	TTCTGTCTCC	180
ACACTGATGT	CTTGATCTG	GAATCGAAGG	ATGATGGTCC	AGACCAGCCC	AAGGGTCAGT	240
CGGTGGTTTC	CGTCCACAAT	GTCATGGGAG	CCCATGTTTT	CCAAGTGCAC	TTTCTGCTCC	300
TTGAGGAACT	GCAGTGCCTT	GTCCACGTTT	TCCAGGCAGT	GGATCCGCAT	GCGGCCCTTT	360
GTAGGCTTTG	GCAGTATCTC	TCCGAGAGAC	ACCTCGAG			398

(2) INFORMATION FOR SEQ ID NO:1264:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 256 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1264:

```

GAATTCGGCC TTCATGGCCT AAAAAAGCT GTTAAGAAAA TATGTTTTAA AAATTTGCCC      60
AACAGGAAGG AGAAAATTAG AATCTAATAG CAAACTTGTG TCAAAGCAGG GGAGACCACA      120
TGATCTTCCT CTTTGAAAAT CTGTCTGGG TGATGACCAT ATGCTCTCTA AACAGGTTTT      180
CTGTGTTTTA GGGAAAGAAG CTCAGAAAGG ACCCCTGCTC TTTGATGACC TCCCTCCGGC      240
CAGCAGTAAC CTCGAG                                         256

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(2) INFORMATION FOR SEQ ID NO:1265:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 249 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1265:

```

GAATTCGGCC TTCATGGCCT ACAGAGTCTA ATTAGCCATA TTTATATGAT AATAATAAAC      60
ATTTTGGCTA CAGTCCTACC TAGATTTTTT TTTTITAGAT GGAGTCTTGC TCTGTGCGCC      120
AGGCTAGAGT GCAGTGGTGC GATCTTGGCT CACTGCAACT TCTGCCTCCC AGGTTCAAGC      180
AACTCTGTTG CCTCAGCCTC CCAAGTAGCT GGGATTACAA GCGCACATGA CCACGCCTGG      240
CAGCTCGAG                                         249

```

(2) INFORMATION FOR SEQ ID NO:1266:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 265 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1266:

```

GAATTCGGCC TTCATGGCCT AGGTTATATA GCAGTGATGC TTTCATAGTA TTTTCTTGA      60
ATAAGGTCCC CAAAACCTTA TTAAGTTCCT GGTAGGCATG GAGCATTGAA GATGGCAGAC      120
ATGGTGCAGT CTCTCAAGGA GTTTACGCTC TAGTGGAGAA AACAATCAGA CAGCCTTAAA      180
ATACATGTAT GGCTACTATA ATAAATACTG TGAAGCAGGA GTGCACCACG AAACCTGGAG      240
TCCTCTCCAT CCTCCCCTTC TCGAG                                         265

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(2) INFORMATION FOR SEQ ID NO:1267:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 293 base pairs
- (B) TYPE: nucleic acid

(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1267:

GAATTCGGCC	TTCATGGCCT	ACTAGACCTG	CCTCGAGATT	AGGGGGGTTA	GACTCAGAAT	60
TCTGTCCAAA	CTCCTGGACG	ACCTCTTGAA	ATTAAGTCAG	GGATTTTATG	TACTGGGTTA	120
ATTTTCGTAAC	CTCTGGGTAT	AATATTAGGT	TTGCATGTAG	AAAGGGTCTC	CAGTATAGGA	180
CTTCAAAGAA	ACTAAGCCAT	AGACGTAATT	TAAGGGCTGT	TCTGATCTGA	AGAAGTGCCA	240
TGGGTAGAAG	TTTTAGCCAT	GGTAAAGAGG	CTTCCTGGCA	TCATTGCTC	GAG	293

(2) INFORMATION FOR SEQ ID NO:1268:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 501 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1268:

GAATTCGGCC	TCATGGCCTA	CTGGTCCAAG	CTGATTACCC	TCATAGTGTC	CATCATTGAG	60
GAAGACAAGA	ATTCCTACAC	TCCCTGCCTC	AACCAGTTTC	CCCAGGAGCT	GAATGTGGGT	120
AAAATCAGCG	CTGAAGTGAT	GTGGAATCTG	TTTGCCCAAG	ACATGAAGTA	CGCCATGGAG	180
GAGCACGACA	AGCATCGTCT	ATGCAAGAGT	GCCGACTACA	TGAACCTCCA	CTTCAAGGTG	240
AAATGGCTCT	ACAATGAGTA	TGTGACGGAA	CTTCCCGCCT	TCAAGGACCG	CGTGCCTGAG	300
TACCTGTCAT	GGTTTGAACC	CTTCGTCATC	CAGTGGCTGG	ATGAGAATGA	GGAGGTGTCC	360
CGGGATTTCC	TGCACGGTGC	CCTGGAGCGA	GACAAGAAGG	ATGGGTTCCA	GCAGACCTCA	420
GAGCATGCCC	TATTCTCCTG	CTCCGTGGTG	GATGTCTTCT	CCCAACTCAA	CCAGAGCTTT	480
GAAATCATCA	AGAAACTCGA	G				501

(2) INFORMATION FOR SEQ ID NO:1269:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 330 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1269:

GAATTCGGCC	TTCATGGCCT	AGGCCCCTGC	TCCACCTGGG	GGGACTGGGA	GTGTGAGTGT	60
GCATGCGCATG	TGTGTGGCAC	AGATGGCTGG	GACGGGTGAC	AGTGTGAGTG	CATGTGTGCA	120
TGCATGTGTG	TATGTGTGTG	TGTGTGTGGC	ATGCGCTGAC	AAATGTGTCC	TTGATCCACA	180
CTGCTCCTGG	CAGAGTGAGT	AACCCAAAGG	CCCCTTCGGC	CTCCTTGTAG	CTGTTTTCTT	240
TCCTTTTGT	GTTGGTTT	AAATACATT	ACACACAAAT	ACAAATTGAC	AGGTCAAAAT	300
CCATGAAATG	AGATCCCCCA	GCGGCTCGAG				330

(2) INFORMATION FOR SEQ ID NO:1270:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 502 base pairs
(B) TYPE: nucleic acid

(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1270:

GAATTCGGCC	TTCATGGCCT	AAAAAAAAAA	TACTGATTCA	CTTTTGCAAT	TTTTCAGATA	60
CTACTTGATG	TGACACCTCC	CCTAGGCTTG	CTGTGGGTCT	CTTGGAAGAT	AGAGCTATAT	120
TAACTCCTTG	ACTTAAAGGG	CAGCAGACTA	TATAAGGTCT	CTTTACAGAC	AGAGTAGGGA	180
GAATAATGAA	AAACTTTTGT	ATTTCTAGAG	AGAAGAGAGA	AGACATAGCA	ATGGAAGTGT	240
TCTTAGCTTT	GTTTGCTACA	ACTCTTCAAA	GTTTAATTTT	AGATTCAGTG	CATTTATTCA	300
TAGAGCATGA	AACATATAAT	CATGCCTTTT	ACTAATTGCG	GATACTTAAA	ATTATATATT	360
TTTGACCTAC	TGTGTTATGG	TCAATTTGAA	AAAGAATGGT	TTGATTATAT	ATTATTGTCT	420
GTAGATTCCC	TGTACTATTC	TAGGATCATA	TGACATATTA	TCATTACTAA	ATATAGCACT	480
AATTATTGAT	GCTCCGCTCG	AG				502

(2) INFORMATION FOR SEQ ID NO:1271:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 285 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1271:

GAATTCGGCC	TTCATGGCCT	ACCCCTGACT	ATTCAGTAGG	AGAAGAAATC	AAAAATCCAT	60
TCTTTTCTCC	TTCTCTCCCT	CCAACAGTGG	CCAGGGGAAG	GGGAAGTGAG	GGCAGGGGCA	120
AAAAGATTGG	GGAATTTTGA	TTTATTATT	TATTGTGACT	TTTCATTTTT	TTGGTATTTG	180
GCTTTACTGG	AATAGGAGGG	CCCCTGCCCA	CTGTGCCCCG	TTTATCCCTT	ATTCCCCAAA	240
CCCTGCTCTC	CCCAACACCT	ACTCACTTAA	GCACCTGTCC	TCGAG		285

(2) INFORMATION FOR SEQ ID NO:1272:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 405 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1272:

GAATTCTAGA	CCTGCCTCCA	ATTGAAGAT	TTATTCTCT	CTTTGGATAT	AGAACAAAAT	60
AACTTTATGT	ACATTTTATT	TCACTTTATT	TTACTATTGG	GTTGGTGCAA	AACAAATTGC	120
AGTTTTCCCA	TGAAAAGTAA	TGGCAAAAAC	TGCAATTACT	TTCGCACCAG	CCCAATATTT	180
TATTTTGAGA	CAGAGTCGCA	CTCTGTCACC	AAGGCTGGAG	TGCAGTGGTG	TCATCCCAAC	240
TCACTACAGC	CTCTGCCTCC	TGGGTTGGAG	AGATTCTTGT	GCGTCAGCTT	CATGTGTAAC	300
TGGAATTACA	GGTGACGCC	ACCACGCCCA	GCTAATTTTT	GTATTTTTTG	TAGAGATGGG	360
GTTTCGCCAT	GTTGCCCTGG	CTGTTCTCAA	ACTCCTGACC	TCGAG		405

(2) INFORMATION FOR SEQ ID NO:1273:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 412 base pairs

(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1273:

GCGATTGAAT TCTAGACCTG GCTCGAGGCA GGTCTAGAAT TCAATCGGCT TCCTGGCAGT	60
GCCCTCTCCC AGATGAGACC TGATCTCTTT TTTGTTTTTT GTTTTTTGTT TTGAGACAGA	120
GTTTTGCTCT TCTTGCCCAG GCTGCACTGA GTTGAGATCG CACCACTGCA CTCCAGCCTG	180
GGTGACAGAG TGAGACCCCA TCTCAAAAAA AAAAAAAAAA ATCTGGCCTT ATGGACTGTG	240
TACTACACTC TAGTGGGGGT AAGAGGCAAT GGGTAAATAG GTAAGTAGAT TATTGGATGT	300
ATTAGAAGGG GCATGGGGAA TGTGGGGTCA AGGTTATAGT TTTAAATAGG GTGGTCAGGG	360
AAAGCTTTCT GAGAAGGTGA CATTTGAAAC AAATACTTGA AGGAGTCTCG AG	412

(2) INFORMATION FOR SEQ ID NO:1274:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 285 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1274:

GAATTCGGCC TTCATGGCCT AGCTATTTTT AAACAATATC TGAGATTATT CATTCAACTA	60
AAACTTATTA AGCATTTAAT ATCTGTCTGG CATTCTTCAG GCACCAAGGA TATTTCTGTG	120
AACAAAACAA AATCTTTGTC ACTATGGAGT TTACGTTTGG TGGTGGCATT GGAGTGAAGA	180
GCTAGGGAAT AAAAAACAA GTCAATATGT AGTATGCCAC TTGGTGGTAA GTCATTTGGA	240
GAATGATGTA GTAGGGAAG AGGAAAAGGG TGTAGGCATC TCGAG	285

(2) INFORMATION FOR SEQ ID NO:1275:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 280 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1275:

GAATTCGGCC TTCATGGCCT ACTCCACACA TTCATCTCCC AAAGGACTCC TTGAATATTT	60
GCCCCAAAAC ATCAGCTCCC AGAAAACACC CCTCCCAGTC ACACACACAC CCAAATTCTC	120
CGATGTATTT TCATTTTTTT TCTCCTCTTC TCTTCTCTTT TFCCTTCCTT CCTTCTCTCT	180
TTTCTCTCTT TCCATCCCTC CCTTCCTTCC TCCCTCCCTT CCTTCCTCCC TCCCTTCCTT	240
CCTCCCTCCC TCCTTTCCTT CCTCCCCCA CCCACTCGAG	280

(2) INFORMATION FOR SEQ ID NO:1276:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 220 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1276:

GAATTCGGCC TTCATGGCCT ACGAGTGGTG CGATTTTTTTT TTCTTAGCTT ATCAGCTATG	60
GTTAGTGTTA GCGTATTTTA TGTGCGGCCC AAGACAATTC TTCCTCTTCC AGTGTGGCCC	120
AGGAAAGCCA AAAGATTGGA CACCCCTGGT AGAGGCAGAA ACTCACTGGG TTAGTTCCAC	180
AGCATCTGAT CAAAGATATG AGGCCAAAGA GCCTCTCGAG	220

(2) INFORMATION FOR SEQ ID NO:1277:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 246 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1277:

GAATTCGGCC TTCATGGCCT ACGAGCTGAG ATTGCGCCAC TGCACTCCAG CCTAGGCAAT	60
AGAGTAAGAC TCCATTTCAA AAAAAAAAAA AAATGTTGAT CAAAAGAGC CAGATGACAG	120
AGTACTCACT GTGTGAGTCC ATTTATTGA AATTCTAGAA CAAAAATAA ATATCCATTG	180
ATAGAAATGG GAACAGTGTT GGCCTATGAA GAATGGAAAT TGA CTGGAAG GAGGCTCTG	240
CTCGAG	246

(2) INFORMATION FOR SEQ ID NO:1278:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 499 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1278:

GAATTCGGCC TTCATGGCCT AGCTGGGCGT GATGGCGGGC GCCTGTAGTC CCAGCCACTC	60
GGGAGGCTGA GGCAGGAGAA TGGCGTGAAC CCGGGAGGCG GAGCTTGAGC TGAGCCAAGA	120
TTGCGCCACT GCACTCCCGC CTGGGCCACA GAGAGAGACT CCATCTCNA AAAAAAAAAA	180
GAAAGAAAAA AAGAAAATAA ACAAAGAAAA AATTAAGATT TTGAAATAA AAACAAATAT	240
TAAAAATTAT TGAAATATAT TGAAAGTTTT TTCACCATAT ATATTTACCT TTTAAAAGGA	300
TATGAATTCA ATTATTTTAT TTGCTTATGG AAAATAGATC CACTGCTCTA AGATGCTACT	360
AATCATGCTC AGAGGATTCA CAACAAACAG ACTGATAAGG TATTACTTAA AGCGCTCTAC	420
ATTAAATAGA GCATTCCAGT TTTCTAGGGC ACACTACTTG CTGTATTTCC AAGGTCAAGC	480
AAAATAGCTT TCGTTCGAG	499

(2) INFORMATION FOR SEQ ID NO:1279:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 317 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1279:

GAATTCGGCC	TTCATGGCCT	AATGAGCTAA	AAGCAGTGTG	ATCTCCGCAT	GTTGGAGCAG	60
CCAAGAAATA	GTTTGGTACT	ACCGACATTG	TCTAATCCAT	GTCAATCCT	CATACAATTT	120
AATTGCTCAA	CCATGCATTT	AAAATCCTC	AAGAAAGGAT	TGGTACTGCA	ACTGTAGGTA	180
AACTGAAAAA	AAATAAGAAA	GAAAGAGTTG	GATGAAAAATG	TGAAAGCCCA	AGTTTAGATG	240
TGCATTAAGT	ATTAAATAGC	ACAGTATCTT	CTTCATGGAG	CCTTTTTTTC	TCCCCCATCC	300
CCTGCAGCTA	CCTCGAG					317

(2) INFORMATION FOR SEQ ID NO:1280:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 407 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1280:

GAATTCGGCC	TTCATGGCCT	ACTTCCTTTC	ATTTTGAAGC	AACAGTTTAT	AAACAGGAAA	60
GTCTACTGGT	TTCATAGAAT	CTGTCAGATT	TGCTTATTTG	CTACTGGTTT	CACGCGCGTG	120
GACTATATTC	CAGTGTTTCT	AGTCAAAGAC	CTTTATCCTC	AAATCATGAG	ATTAGAGTAA	180
AACAACTGCT	GTAAGGTTGA	GCATTTTCATG	ACCAATGACT	ATGAAGGCAC	ATTCACCAAA	240
CACAGGCACT	TTAAGGGCAT	CCTTGATTAA	TTTGCTAATT	GCTATTTTTT	GTTGGTATGT	300
GAATTCCTGC	TAGGAGGCCG	AGGCTAGTAG	GCAATGAAAA	AGACAGAACA	ATGGTAAAAT	360
GCAGCCCCGG	TCCTCTACAA	ATTGACAGTA	TAATTTAGGG	GCTCGAG		407

(2) INFORMATION FOR SEQ ID NO:1281:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 281 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1281:

GAATTCGGCC	TTCATGGCCT	AAGATTGACA	AAGAAATAGA	GCTTCACAGA	ATTCTTCATC	60
ATAAGCATGT	AGTGCAGTTT	TACCACTACT	TCGAGGACAA	AGAAAACATT	TACATTCTCT	120
TGGAATACTG	CAGTAGAAGG	TCAATGGCTC	ATATTTTGAA	AGCAAGAAAG	GTGTTGACAG	180
AGCCAGAAGT	TCGATACTAC	CTCAGGCAGA	TTGTGTCTGG	ACTGAAATAC	CTTCATGAAC	240
AAGAAATCTT	GCACAGAGAT	CTCAAAC TAG	GGAACCTCGA	G		281

(2) INFORMATION FOR SEQ ID NO:1282:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 250 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1282:

GAATTCGGCC TTCATGGCCT AGTAGTTTAT TATATAGAAA TTATTGTGCC TTGTCTTAGT 60
 TGTGCCCTTT GACTCAGCAA TTCCCCTTCT ATAAAATTTT CCCAAGCAGA TGATTATGGA 120
 TATATGCACC AATTTGGAAA CAGGGATGTT TATTGTTTAT AGTAGCACTC AACTGAAAAC 180
 AACATAGTTG TCTTCAGGAG CGGGGACTGA TTAAATTATG ACATGAAGCA GAATAATGCA 240
 AAATCTCGAG 250

(2) INFORMATION FOR SEQ ID NO:1283:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 257 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1283:

GAATTCGGCC TTCATGGCCT AGCTGAAGAA GGCCTTCACA GAGCTTCAAG CCAAAGTTAT 60
 TGACACTCAA CAGAAGGTGA AGCTCGCAGA CATACAGATT GAACAGCTAA ACAGAACGAA 120
 AAAGCATGCA CATCTTACAG ATACAGAGAT CATGACTTTG GTAGATGAGA CTAACATGTA 180
 TGAAGGTGTA GGAAGAATGT TTATTCTTCA GTCCAAGGAA GCAATTCACA GTCAGCTGTT 240
 AGAGAAGCAG TCTCGAG 257

(2) INFORMATION FOR SEQ ID NO:1284:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 434 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1284:

GAATTCGGCC TTCATGGCCT AAAGACTAGC ATATTTATCT TTGACTTGAT TAATCAGACC 60
 TAATTTGCAT TCGCAAATGA GACTGATAAA AATGGATTTA CCTTTTAACC TTTAGAGGAG 120
 GAAAGGTATT TCTCTGCAAG ATTTCTGGGG CTATCGTTTC TTAACCGATA AGAAGCCACT 180
 CCTTTATCAA TAAAGATGAA AATCCGCAAT TTGCATTAGT GAATGGGACT GATTATTATA 240
 TAGTTAATTA GCATCTGGAA ATGAGGATTA TCTTAATTAC AAAGCACAAT TTCCCTAATA 300
 GCTACAAAAC TGTAAGTTTG ATCCATGTGG AAATTGGTAA CATTATTATG TAATTAGTGA 360
 TAACATTAAT AGTGTAGAAT ATTTAGATGT AATTTGCATA TGCAAATGTG ATTTACCTGA 420
 GCCAAAACT CGAG 434

(2) INFORMATION FOR SEQ ID NO:1285:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 302 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1285:

AGCAATATTT ATTTTAGACA GACTTCTGCG TTATGACCCG GCTGCTGGGC TACGTGGACC 60
 CCCTGGATCC CAGCTTTGTG GCTGCCGTCA TCACCATCAC CTTCAATCCG CTCTACTGGA 120

ATGTGGTTGC	ACGATGGGAA	CACAAGACCC	GCAAGCTGAG	CAGGGCCTTC	GGATCCCCCT	180
ACCTGGCCTG	CTACTCTCTA	AGCATCACCA	TCCTGCTCCT	GAAGTTCTTG	CGCTCGCACT	240
GCTTCACGCA	GGCCATGCTG	AGCCAGCCCA	GGATGGAGAG	CCTGGACACC	CCCGCACTCG	300
AG						302

(2) INFORMATION FOR SEQ ID NO:1286:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 245 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1286:

GAATTCGGCC	TTCATGGCCT	AATCTTTTCT	AATTGTCTT	AATGCTTTAT	AATTTTCTAT	60
GCAGAGGTCT	TGTAGATCTC	TTTCCAAGAT	ATTTGATGTT	TGTTTGTGTT	TTTGTGTTGTT	120
TGTTTTTTGA	GACGGAGTCT	CACTCTGTTG	CCCAGGCTGG	AGTGCAGTGG	CGTGATCTTG	180
GCTCACTGCA	ACCTCCGCCT	CCTGGGTTCA	AGCAATTCTC	CTGCCTCAGC	CTCCCAAGTC	240
TCGAG						245

(2) INFORMATION FOR SEQ ID NO:1287:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 232 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1287:

GAATTCGGCC	TTCATGGCCT	AATTTTTTTT	CTCCTCTTTC	TTCTAGTACA	TATTGATAGG	60
TATAACATAA	TTAAGGTTTA	AAAAAAATTA	GACATAGTTA	TTCAGATTTA	GGACCAGTAA	120
GGATAGAACT	TTCTCTTATT	TATGAAAAAA	AATGCTAATA	ATTTTGGGGC	AGTTTTTTCC	180
TTTAATTATT	TTTTTCAATT	TCAAGTTTAA	TTTTATTTTA	GCTGATCTCG	AG	232

(2) INFORMATION FOR SEQ ID NO:1288:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 298 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1288:

GAATTCGGCC	TTCATGGCCT	ATAGGCCATG	AAGGCCGCCT	TCATGGCCTA	AGAAGATCAC	60
TTGAATCTGA	GAGGTAGAGG	CTGCAGTGAG	CGAAGATCAC	ACCACTGGAC	TCCAGCCTGG	120
GCAACAGAGT	GAGACCCTGT	CTCAAAAACA	AAGAAGAGCA	CTAGCTTCTC	TATCAAGTAA	180
GTGTAGGGTT	TTAAAAACA	CAAATGGACT	TTGGTAGACC	AAAACAAAAG	CCCACGAGTA	240
TGGAAGTTTC	CCTTGAAGTT	GGAAATTCAA	TTCCCCCTT	ACCCCCCAA	CCCTCGAG	298

(2) INFORMATION FOR SEQ ID NO:1289:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 227 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1289:

GCGATTGAAT TCTAGACCTG CCTCGAGCCA TACCCATGGT CAGCCTCTTC CTCGTGTTCA	60
CGGCCTTCGT CATCAGCAAC ATCGGCCACA TCGGCCGCA GAGGACCATT CTGGCTTTTG	120
TCTCTGGCAT CTTCTTCATA CTATCGGGCC TCTCCTTGGT GGTGGGCTTG GTTCTTTACA	180
TCTCCAGCAT CAACGACGAG GTCATGAACA GGCCCAAACA GCTCGAG	227

(2) INFORMATION FOR SEQ ID NO:1290:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 264 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1290:

GAATTCGGCC TTCATGGCCT AGACAACTCT TAGCTAAATG TGGTTTGGTT TTGAGCTGGA	60
AGAGAGTACA AGGTGCTTCC GGAAAGCTTC AAGCCTTCGG ATTCTGTGAG TACAAGGAGC	120
CAGAATCTAC CCTCCGTGCA CTCAGATTAT TACATGACCT GCAAATTGGA GAGAAAAAGC	180
TACTCGTTAA AGTTGATGCA AAGACAAAGG CACAGCTGGA TGAATGGAAA GCAAAGAAGA	240
AAGCTTCTAA TGGGAATACT CGAG	264

(2) INFORMATION FOR SEQ ID NO:1291:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 323 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1291:

GAATTCGGCC TTCATGGCCT AGGTGCTCTC AAGGATCAGT ACTGGGTAAC AATAATCAAA	60
CTTTGAATTT AAACATGCAT CTATTATTTG TGTTTTTTGT TTTTGTTTT GAGGCAAAGT	120
CTCACTCTGT CACCCAGGCT GGAGTGAAGC AGCCCAATCT TGGCTTACTG CAACCTCCAC	180
CCCCTGGGT CAAGCAATTC TCCTGCCTCA GTCTACCTAG TGGCTGGGAT TACAGGCGCC	240
CGCCACCACG CCCAGGTAAT TTTGTGTTT TAGTAGAGAT GGGGTTTCAC CATGTTGGCC	300
AGGCTGTCT AGAATTCAAT CGG	323

(2) INFORMATION FOR SEQ ID NO:1292:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 289 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1292:

GCTCGAGAAA	CTTCTGCTGC	ACGTGCGTCT	TCCCCTCCAC	CTTCACCCCT	TGTGGCTCAC	60
TCACGCACCC	ACTCTCCAGT	CCACCCCTCC	TCAGAGACCC	TGTCCACTCA	TCCATCTCTC	120
TCCCATTGCG	CTTCCTCTTC	ACTCCGTTCC	TTCTGCCTCC	CACCATATGC	AAATCTTCTC	180
CATCCTTAAA	AGCCTGATTG	CCTCCTCTGG	ATTTTTCAC	ACTCTGGGG	AACTTCCTGT	240
GACTCCCTGC	CCTTCACCAC	CAGCCTTTCC	CAAAGAGAAA	TCCCTCTCA		289

(2) INFORMATION FOR SEQ ID NO:1293:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 421 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1293:

GAATTCGGCC	TTCATGGCCT	AGTTGAAATC	TTTAGGAATG	AACTTCTGAG	GGCCAAAAAA	60
TGTGACTGAC	GGGAACAATT	CTTAAACTGA	TTAACTAGCT	GTAATATAGT	TTTGTGAATT	120
TATTGCACTG	ATGTTGTACC	TTGTGGTATA	TCTGTCCCTA	TTAAATAAGT	GTTGTTTTCT	180
CCTCTTTAAT	ATTGCTGTGA	ACAGTGGTGC	CCATTGTAGC	ATATGTTTGA	TTTTTTTTTA	240
TTATTTTATA	AGAAACTAC	GTAAATTTTA	CCTTACTTTC	ATTGTAAATA	AGCCTGTCTT	300
CCTATCTGGA	TTTTTTGTGT	GCATACATAT	TCTACTGATT	AACTACTTTT	GCAGTTTAA	360
TCCTGTATTA	TTTCTTCTAC	TTTGTTTTGT	GTAAAAGGGG	AAAAAATAAA	AAAAGCTCGA	420
G						421

(2) INFORMATION FOR SEQ ID NO:1294:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 408 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1294:

GAATTCGGCC	TTCATGGCCT	ACAGGTGTAT	GTCAACATGC	CTGGCTAATT	TTGTTTTTCT	60
TTTCTTTTTT	TTTTTTTCCT	AGAGACAGGG	TCTCACTATG	TTGTCTGTCC	TGGCTGGTCT	120
CAAACTCCTG	GGCTCCATCT	TCCCGCTTCG	GCTTCTTGAA	GTGCTGGGAT	TACAATAGGC	180
ATGAGCCACT	ATGCCCATCC	TAAAGTTTTA	CAGCCCAATA	ATAGTAATAT	TCCATCACTA	240
CAGCTATCAT	TGAGTTTTCAG	AAGTTAGACT	GTAAAGTT	TCAGTAAAGA	GCTTTAACCA	300
GTTTATTGTG	GCAATACTGT	GTACACAATT	ATTTTTTGTA	AAAGGAAGGA	GATTTCTGTC	360
TTAAATAGCT	TTAATAAAGT	TTCAAGTTTCA	TATACAGGAA	ACCTCGAG		408

(2) INFORMATION FOR SEQ ID NO:1295:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 259 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1295:

GAATTCGGCC TTCATGGCCT ACAGGCACTC CAGTTATAAT TATGTGCCTT TCTTCCATTT	60
CTACCACTTT CTCTGATACT TCTCACTTCT TTCTCTGGTA CTTCTCACTT CTTTCTCTGG	120
TATCATTTTC ATTCTTCATC ATTGTTTTAG TGCCTTTACT TCAATTCCTT CATATTGGA	180
ATTTTCTTT TTATCATCTT GTGATTCAGT TTTTATTAT TTTTGTATG TATTCTCCTT	240
TTCTCCATT CCACTCGAG	259

(2) INFORMATION FOR SEQ ID NO:1296:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 257 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1296:

GAATTCGGCC TTCATGGCCT AGTGGAGAGT GCTATCATTAC ACACCTGAAC TCTGGGCCAG	60
CTTAAGTGTA TATTCTGTAA AAAATTTGAA ATCCCCCAA TGTCACATGC TATGACAGTC	120
ACTTTCTTTA GTACTTTGTA ATCATACAAA ATGGTGTATG GGCTAAATAT TGCAGCACCT	180
ATGTCGTCAT CCTCCATGTT GCTTATTGAT CATGGAATGT TAATTTAGCA ATAATTTTCT	240
CTGTGTGTGC GCTCGAG	257

(2) INFORMATION FOR SEQ ID NO:1297:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 327 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1297:

GAATTCGGCC TTCATGCAAG TAGGGTATGT AGGCTTCAGT TGGTTCTACT TTCAGAGAGT	60
TAAGATGGAA TGAGGCAGCT CATGGCACTA CAGGTCAGTT GCCTTCTCTC CAAAATGTTT	120
ACTCATGCAT GTGGGCACTC ATTGTATTG AATAACAGCA ACAGTGCCTC CCTCAGTTTG	180
GAACCTCTAG TCCAATTGCT CACTCATGGT CCCTGCCTTA ACCCCAGTCA AGTTCAAAGC	240
CATAGGCATC ATTTGTCCGA CTGACATATT AGGGCATCTA CCAGTCAAAG GGTGATTGTT	300
GATAGTACC TTTGGCCCGT TCTCGAG	327

(2) INFORMATION FOR SEQ ID NO:1298:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 286 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1298:

GAATTCGGCC	TTCATGGCCT	ACACTCTCAT	GTTTGTGCA	GCATTATTCA	CAATAGCCAA	60
GGTATGGAGT	CAACCTGAAT	GTCGAACACA	TGAATGGATA	AAGAAAATGT	TCACACACAC	120
AATGAAATGT	GATTTAGCCT	TTAAAAAGAA	GGAAATCCTG	CCATTGGGAA	CAACATGGAT	180
GAACCTGGAG	GGCATTGTGC	TAAGTGAAT	AAACCAGACA	CAGAAAGACA	AACACTGCAT	240
GACCTCACTT	ACTGTGGAAC	CCCTCGAATT	CTGGATCTCC	CTCGAG		285

(2) INFORMATION FOR SEQ ID NO:1299:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 285 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1299:

GAATTCGGCC	TTCATGGCCT	AATGAATTTA	GTATTATTTT	TATCATTTCA	ATTGCAAATT	60
GTCAGTATCC	CCTGCTACGT	TTCTACTAAT	TTACCATCGC	TTCTTCAAAA	AATTGTGTTT	120
AGAGTGCTAC	AATTTAGAC	TTTGAAATGA	ATCACTATAA	CTTTTAAAAA	TTAGAGATTT	180
TAAAACTGG	AGATTGAATA	TATATAAAAA	ATACAAAATT	TGACATTTAA	AACCTCATTG	240
AACTTTAA	AAAGCCAGAC	TCATATTAAG	GCACACACCC	TCGAG		285

(2) INFORMATION FOR SEQ ID NO:1300:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 292 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1300:

GAATTCGGCC	TTCATGGCCT	AGGGCCAATG	GCCAGGATCT	CTGGGGACTA	GAAGGGTGGG	60
TTCCTGAACC	TGGGTAACAA	CGAGACAAAC	TCTAGCAATC	TGAGCAAGGG	AAGGGTCATC	120
AAAGTCCCAA	AATCTAGCCC	ACTAGCTGCC	TAGCCAGGTA	AACCAAGGCT	TAGGGAGTTT	180
AGACCCCTTC	ACATAAAGAA	GCTTAATAAA	AAGTGTGGG	TGAAGAGATA	AACACATGAA	240
GGGGTTGGCT	AAAGTCAAAA	GAAGATCCGA	GGCAGGTCTA	GAATTCAATC	GG	292

(2) INFORMATION FOR SEQ ID NO:1301:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 548 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1301:

GAATTCGGCC	TTCATGGCCT	ACTCCTCATT	TGCCACCACC	AGGCCAGTTT	GTCCCTTTCC	60
AAACACAGCA	ATCACGATCG	CCTCTGCAAA	GGATAGAAAA	TGAAGTGGAA	CTCTTAGGAG	120
AACATCTTCC	AGTAGGAGGT	TTACTTACC	CTCCATCAGC	CCACCCCCCA	ACATTACCTC	180
CATCAGCTCC	CTTGAGTTC	TTAACACATG	ATCCTTTGCA	TCAGGAGGTG	TCCTTTGGAG	240
TACCTTATCC	TCCATTTATG	CCTCGGAGGC	TTACAGGATA	GATAGATACCG	ATCCAGCAG	300

CCAATACCAC CTCCCCCTTA TCATCCCAGC TTAGTGCCAT ATGTGTTATC AATGCTTCCA 360
 GTGCCACCTG CAGTGGGCCC AACTTTTCAGC TTTGAATTAG ATGTAGAAGA TGGAGAAGTA 420
 GAAAATTACG AGGCCCTGTT AAACCTGGCA GAGCGACTGG GAGAGGCAAA GCCTCGTGGA 480
 CTGACTAAAG CAGATATTGA ACAACTTCCT TCTTATCGGT TCAATCCTAA CAACCACCAA 540
 TCCTCGAG 548

(2) INFORMATION FOR SEQ ID NO:1302:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 384 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1302:

GAATTCGGCC TTCATGGCCT AGTATCTATC TAGTGCCTGT TTGTGCGTTT TTTTCTTTCT 60
 TCCGCTGCTT CCCCATTTTC CTTCTGTCCT TTTTCTCCTG CTCCTTGTTT TCCGAGCAGC 120
 ACATGGGGTT CCTCGGAGGA GCAGAGGTGG CCGCCGTGGG GGGGCGTTTG GGCTGCGGTG 180
 CTGCGTCATT TTTCTTTTGC TTTCTCTTTA CTTTAGACAC TGGCCCAACT CCAGGCGTTT 240
 CCTTTCATT C CTTAGTGCT TCTCTTCTGA CCTGCATGTT GAGTTCGTGA TTGCTGGGGC 300
 TTCCAACAAA AACCAGAGTC ACTGACAGAG GGAACAGCAG AGACCTTGTT GGTATTCAGC 360
 TGTGATGGAT ATAGCGATCT CGAG 384

(2) INFORMATION FOR SEQ ID NO:1303:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 140 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1303:

GAATTCGGCC AAAGAGGCCT AGGGTACGTG AATCTATTTT TTCAGCTGGA AATTTTATGA 60
 AATCTGGTGT GTATTTTATA CTTATAGCAT ATCTCGAGGC AGGTCTAAAT TCAATTCTAG 120
 ACCTGCCTCA AGAGCTCGAG 140

(2) INFORMATION FOR SEQ ID NO:1304:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 620 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1304:

GAATTCGGCC AAAGAGGCCT AAATAAGTTT ACTTTTATTT TTGGTAACAC TTTACTGCAT 60
 TGTCTGAATA TTGACAATCA GTATGCATTA TGAAGCTACC TGGCTAACAT TGTGTAATCA 120
 CTGTGTGTGC CAGGCCCTGG GTTCAATGCT CTACATGCAC TTATATTTCA TTTAATTTCTC 180
 TCTGCAACCT GAGATGGTAT AGCCACCTCA TTTTACAGAG TGAAACTGA GGCTCAGAGA 240
 CTGAAAGTTA AGCCTGAGGT TGCAGTCAAT AAGAGGCAGA GCTGGAACCTG AAACCTACCT 300

GTGTCTGACC	ACCAGTTCGT	GTTCTGACGG	CAGGCTAGTC	TGCATCACAG	AGTGTGGAGT	360
AGATGGTGCA	TGCCTGCTAG	GATGGGCTAG	GTATCACTGT	AGGTAAGAAA	CAGCCCCAAA	420
CTATGGAAAT	GTACACCACC	GAAGGCTCTT	TTCCTGCCCA	TGCTGCACAT	CCTCCATGGC	480
TCTCCTGTGC	CCTGTGCCCC	ACATGCCCTC	ATCCTGCCAC	GAGAATAAAG	GAGCAGCCTC	540
CATATGGGAG	CTGTCACTG	CTCTAAGAGA	TGAAGGAGAG	AGTGGCCCGT	CTCAATGGCT	600
CCCAACTCTT	CTGCCTCGAG					620

(2) INFORMATION FOR SEQ ID NO:1305:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 736 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1305:

GAATTCGGCC	AAAGAGGCCT	ACTTTTGGCT	CAATGTTTTT	CAAACCTATT	TGACCCCCAA	60
ACCTTTTTC	TATACCAAT	AATAAGCTAC	AGAATAATA	TTCTGCAAT	GTCTCTTGA	120
ACACACTGCC	TTAAACAGAT	ATTTCTATAG	CTGTCACTAT	AGTTATGTTG	CTCCCAAGCC	180
TAGTTATCTC	CAGTTGTTTT	AAGGGTGTTA	TGAAAAATTC	TTAAAAATATA	TATGAATTTG	240
TGTAACACAC	ACAGAGACAC	ACACACATAC	TACTTTAAGG	GGGTGAGGAT	CATTAATTCA	300
GATAATTTT	AAGTTTCCTA	GTGATTCTCA	ATCTCTTTGA	ATTTTACTTA	CATTTACACA	360
CACACGCACA	CACATATGTA	TATACACATA	TCATTTTAAG	AAGCTGAGGA	TCACTAATTC	420
AGATAATGTA	TAAGTTTCCC	AGTGATTCTC	AACCTCTTTG	AATTTTACTT	ATAATTACAT	480
ACACACACAC	ACTGCTACTT	ATATAAATGT	TCTCATGTAA	TCATGGTAAC	AGCTCAAATT	540
CCCAAAGCAA	GGGAAGACTT	CTCATTGTCA	GTTAAACCTG	TTAAAAACATG	AAAATATTCA	600
TTGAGCCTAG	TTCTTGTTA	TAAAATACAA	GAAATAAGAC	ATTCAGGCAT	TTTCCCTTTA	660
TGAAGATGTT	CAGTCATCCT	TTCTTGTAAC	TACAATTAGG	AAAAGTATAT	GTCTTTATTC	720
CATTGAAGTT	CTCGAG					736

(2) INFORMATION FOR SEQ ID NO:1306:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 511 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1306:

GAATTCGGCC	AAAGAGGCCT	ACAGCAATAT	GCATCTTGCA	CGTCTGGTCG	GCTCCTGCTC	60
CCTCCTTCTG	CTACTGGGGG	CCCTGTCTGG	ATGGGCGGCC	AGCGATGACC	CCATTGAGAA	120
GGTCATTGAA	GGGATCAACC	GAGGGCTGAG	CAATGCAGAG	AGAGAGGTGG	GCAAGGCCCT	180
GGATGGCATC	AACAGTGGA	TCACGCATGC	CGGAAGGGAA	GTGGAGAAGG	TTTTCAACGG	240
ACTTAGCAAC	ATGGGGAGCC	ACACCGGCAA	GGAGTTGGAC	AAAGGCGTCC	AGGGGCTCAA	300
CCACGGCATG	GACAAGGTTG	CCCATGAGAT	CAACCATGGT	ATTGGACAAG	CAGGAAAGGA	360
AGCAGAGAAG	CTTGGCCATG	GGGTCAACAA	CGCTGCTGGA	CAGGTTGGGA	AGGAGGCAGA	420
CAAACGTATC	CATCATGGGG	TCCATCACGG	GGCCAACCAG	GCGGGAAGTG	AGGCAGGGAA	480
GTTTGGCCAG	GGAGTCGACA	ATGCACTCGA	G			511

(2) INFORMATION FOR SEQ ID NO:1307:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 219 base pairs
- (B) TYPE: nucleic acid

- (C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1307:

GAATTCGGCC AAAGAGGCCT AATTTTCCC CACACCACAC CACTGTCCTC TGTGCCTGTG	60
GAAACCACTC AAATGCCTCT CCCCAGCCT TCTTCAGTA ACAACCATCT CATCCGTTG	120
ATTACTGTAG CTTTCGGCCT GTATAACCCC TCCTTATGTC ATGCCTGTAC CAGATGTTCC	180
ACTGCATCTG TATCCACCA GATTGCACAT ACTCTCGAG	219

(2) INFORMATION FOR SEQ ID NO:1308:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 344 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1308:

GCACTGCGCC TGGCCCTTGT GGATACTTTC TAGGTGATTT GAGGAGGAAA GGCACAGCCA	60
TGTCTCCTAA AGTTAACAAG CACTAAGCTT TCCCAAGTAG TGAAATGTCA AGCCTCTGCT	120
TCTGCTCACTT ATTTGTTTCA TCAGCAGAAA GTCCTGAGA GCCTTCTGTA CACCAGGCAC	180
AGTGCTGGGC AGTGAAAGAG ACAGACATGT CCCTGGATCC AGGGAGGAGA TGACCAAGTG	240
ATGGCTGTCA GGCCAGACC TTGCTGTTTG TCTGCAGCCT CTTCCCTCAG GCAACTTGTT	300
CTCTATCAGG AGAAATGAAA TAATTATTAT CTGAGCTCT CGAG	344

(2) INFORMATION FOR SEQ ID NO:1309:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 565 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1309:

GAATTCGGCC TTCATGCCTA AAAAGGGTCA GAGGAAGGCA GTATCCTTGG GGTGTTGCTG	60
AAGTTGAAAA TGGTGAACAT TGTGATTTTA CAATCCTAAG AAATATGTTG ATAAGAACAC	120
ACATGCAGGA CTGAAAGAT GTTACTAATA ATGTCCACTA TGAGAACTAC AGAAGCAGAA	180
AACTGCAGC TGTGACTTAT AATGGAGTTG ATAACAACAA GAATAAAGGG CAGCTGACTA	240
AGAGCCCTCG AGTTGCAGGG AGCCCAGATC ATGCCACTGC TCTCCAGCCT GGGTGACAGA	300
GCAAGACTCT GTGCCCCCCC CCCACCCCAA AAAAAAGAA AACAAAAATT AAAATCTTTA	360
GTTACTGTAT TATTCAAAAA TGTCTACTTT CAAGAAAAAC TACAGCCATG CAAAGAAACA	420
GTAAATGTG ACCATACTCA GGAAAAAAG CAGACAATAG AAATGGCTTC TCAGTAGGGC	480
TATATGTTGG ATTTAGCAGG CAAAGACTTC AGAGGCCTTT TAATAAGTAT ATTCAAAGAA	540
TTACAGGAAA ATATGAAAAC TCGAG	565

(2) INFORMATION FOR SEQ ID NO:1310:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 104 base pairs
(B) TYPE: nucleic acid

(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1310:

TGCACAGCTG TAGTACCCCA AGAAGAAAAT GTTACTTCTC TCATCTGGGC AAAACCCACA 60
GAAGACTTCC CAGCTTCTGC CACATAAAAG ACACAGAACT CGAG 104

(2) INFORMATION FOR SEQ ID NO:1311:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 105 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1311:

GAATTTTTCG TTCTGTTTAG CATGCTATCC TGTGTGAAAG AACTGAAAT CCAATATTAT 60
GGAGAGTATG TTAAAGCCAC CTCTGAAATG AAGACCACTC TCGAG 105

(2) INFORMATION FOR SEQ ID NO:1312:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 407 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1312:

GAATTCGGCC TTCATGGCCT AAAGGGAAGG GAGGTGTGAG GAGGATGGAG TAAGAGTGAG 60
AGGTCCTAAG AACATGGAGG GAGGCTGTGT GTGATCGATG GAGAAATATG GTCCTGAGAG 120
ATTTCTTGTA GTCAAGAATG GCCAATACAT GTCTACCTTT AACTGGTATT GGAAGGAAGT 180
AGTTTCCTGC TCTGTGCTCT AAATACTCTC TATTACCCTC AAGATGTCAG CAAATGTGA 240
TACATAGCAA TCTTGTGTTA GAGATGCTTT AGGAATTGCA GAAAAACCAT GCTATCAAGT 300
GGTAGGGAAG TGAGTGGCAA GAGGATGTCT GTCACAGAAA CTAGGGATAG AGGGGCTGGC 360
AATGGCAGAG ATGCAGGTGG AGTGGACTGA TTAAGGGGAG TCTCGAG 407

(2) INFORMATION FOR SEQ ID NO:1313:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 292 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1313:

GAATTCGGCC TTCATGGCCT AGGTCTTGCC ACATTGGCCA GGCTGGTCTC GAACTCCTGG 60

GTTCAAGTAG TCCTCCACCT CAGCCTCTCA AAGTACTGGG ATTACAAGCG TTGAGCCACC 120
 CCCCCAGCCT TTGCCTTTTT TTTTTTTTTT TTTTTTTTGA GGAGGAGAAT TAATTGATAC 180
 ATAGACCCCT TAAGAGAAGG GATGCTATGG GCAGGAAGAG ATTGAAGGTA AAGGAAAAAG 240
 GATTGAGCAC CCAAGCAAAA CAATTGGCCT GTGATAGAAG GGCGATCTCG AG 292

(2) INFORMATION FOR SEQ ID NO:1314:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 309 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1314:

GAATTCGGCC TTCATGGCCT AGATCCAAGA AGCTCAACAG ACCTCAAGTA GGATAAACAC 60
 AAACAGATCT TCACTAAGTC CTAATGCTGA AAGACAAAGA CGAGGAGAAC ATCTTGAAAG 120
 CAGTGAGAGA AAAACAACCT ATTATGGAGA GAGCAATGAT AAAATTCCTA TCAGAACAGT 180
 GGAGGCCAGA AGGAAATAGA GTGACATATT CAAATGCTG AAGGAAAAAT TTGCAACTAC 240
 AAGTTCTAGA TCCAGCAAAA TTATCCTTCA AGAATGAAGG TTTAGTAAAG ACATCCCGAG 300
 ACCCTCGAG 309

(2) INFORMATION FOR SEQ ID NO:1315:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 469 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1315:

GGCCCCAGCT CCTGAGTAGC TGGGATTACA GGCATGCACC ACCACACCCA GCTAATTTTG 60
 TATTTTTAGT AGAGACAGGG TTTCACCATG TTGGTCGGGC TGGTCTCAA CTCCTGACCT 120
 CAGTGATCCA CCCGCCTTAG CCTCCAGAG TGTTAGAATT ACAGGCGTGA GCCACTGCAC 180
 CCGGCTGGGA AACATTTTAA AACCGGCGCA GGGTTGTCCT TGAAAGTCCC AGGTTTCCTC 240
 ATTGGCCCTG CCATTGGCGG GTGGGTGATT TCAGGCAGGA CACGCAGTGT CTGGGGACCC 300
 TGGCTTCTC ACTGGAAGAC GATTGTTATG GTCCAGAGGG TGGTAACTCA GGTGTTTCATG 360
 TCTGATTCTG GATGTTCTCT GCAGCTGCTG GAGTCTCCTG ATTGGAGAGC AGCAAATGAC 420
 TGTTCATGA CAGTTCTAGT TGTACCTCTA GCACCCCCAC TCGCTCGAG 469

(2) INFORMATION FOR SEQ ID NO:1316:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 262 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1316:

GAATTCGGCC TTCATGGCCT AATCTATGTG TGTCAACTTT CATAGAACCC TACACCAAAA 60
 AAGGTGAATT TTATTCGTG ATAAATTAAA AAGTAAACA AAAGAGACAA AAATAGTAAC 120

CAGGGAAGCT TTCAAAAAAT ATATGTTCTT GTTCAAGACC AGCATGGCCA ACATGGCGAA	180
ATCCCATCTC TAATAAAAAT AGAAAAATTA GCCAGGCGTG GTGGTGGGCG CATGTAGTCC	240
CAGCTATCCA GCACCGCTCG AG	262

(2) INFORMATION FOR SEQ ID NO:1317:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 497 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1317:

GAATTCGGCC TTCATGGCCT AAAGGAATGG TATTTTGGCA ACGCAGACAA AGAAAGGAGT	60
GGCCCGTATG GATTTCA TGA GATGCAAGAA TTGTGGACCA AAGGAATGTT AAATGCAAAA	120
ACCAGATGCT GGGCTCAAGG CATGGATGGA TGGCGACCAC TTCAGTCCAT ACCCCAGCTC	180
CGAGTCATAT AAGGTAACCC AGACAACCAC CTACGAATTT AAAGCTCCTA TAAGTTGCCC	240
TTTCTGCATC CGAAGTGTGA TATTTGAAAG TTA AAAACGT TATCTTACAT ACATAGATCT	300
TAAAACGTAT CTTACACCAC AACCTACTCA CAGATGCAAA GGCAGTGGTC GTGGTCTTCC	360
ATTGCTTGGG GTCCTGGGGC CGGGTTTGAG GCTGAATGTC AGGGTTTCCT TTGCCATAAC	420
CTCATTCTGC ACCACGTGCT GTCAGCCAGG CAGCCAATGT GGA CTGGAG GCTGGCATCT	480
GCTGGGCACT GCTCGAG	497

(2) INFORMATION FOR SEQ ID NO:1318:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 451 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1318:

GAATTCGGCC TTCATGGCCT AATCTGGATG TCTGTCCAAG GCCTGACTGC TGA ACTCCTA	60
CTTTTCCTAC AAAACCCTAC CCACATGGCC CTTCTGCGG GAAGAGATCT TGAGCCTCCC	120
TGGCTATTAA GACTCTGCTG TGCAGCCTTC TTTTACTGGA CTCAGGGCTA TCTTCCCCAG	180
ACTAGGGCCT TCTTGAGGAC AATCGTGGTG GCCCAGTGGT TGACGCTGTC TCCCCTGCAT	240
G TAGTTGGTC TTCCTGGTTG CTTCTTGCCC CTGTGGCTCC CTTGGGAGAC TGAAACTCAG	300
AGGACAGCTT CTGGTCTGCT GTTACATGGC TCCCACAGG AGACTGGCCC CACCTGTGCC	360
CCACCCATCA CAGCTAGGGC CTGGGATGGG TCAGACACTG GAAGAGCCTC CCCCTAGGCC	420
ATGCATATGG ATCGTGCCCA CACGCCTCGA G	451

(2) INFORMATION FOR SEQ ID NO:1319:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 477 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1319:

GAATTCGGCC	TTCATGGCCT	ACACTACGGT	ACTCCCAGCA	TATCACCTT	AATGTAAGTT	60
TAAATAACAT	GGCCATTTT	TAAAAAGGAC	ACAGGAACTA	CATAACATT	TTTTTCAGAT	120
TTTGGAAAAT	TCTAAATATG	TCTAGAAAAA	CTTTCTTTC	TGTTCCATT	TCCTTCCTAT	180
TCTCCATGAC	CCCCTCCCCG	CGGACTGTAT	CAGGTACAGC	CTGTTGAAA	TCCAGCACCG	240
CACATTAGGC	ACACCACTGG	TAAGTTTACT	TGTTGAGTTA	TCACCTTTT	TTTCCTTTA	300
ATCAGAGAGG	CAGCTCTGTG	TTGAAGATGC	TAGGTAGTGA	TGGAAAAGAC	ATTAGGAAAA	360
TTTGTACC	TGGTAACCGG	GGATGGACAT	CATGACCTT	TGTGATATGC	ATGCTGTGGC	420
CTTGGTAGTC	TCTTCCCCTA	ATTAACATCC	TGTGAGAAAC	GTGAGAGATG	ACTCGAG	477

(2) INFORMATION FOR SEQ ID NO:1320:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 284 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1320:

GAATTCGGCC	TTCATGGCCT	AGACGGAGGC	TGGAGATTCA	CATGGGGCGA	GGAGTTGCAG	60
ACCAGCCTGG	GCAAAGCATG	GTGAGGCCCC	GTCTCTGCAG	AAATGAGAAA	ATGAGCTGGA	120
TGTAGTGGCA	CCGACATGTG	GTCCCAGCTG	CTGGGAGGGC	TGAGGTGGGA	GGATTGCTTG	180
AGCCTAGGAG	TTCAAGGCTG	CGGTGAGTAG	ATCGTGCCAC	TGCGCTCCAT	CCCTGGCAAC	240
AGAGCAAGAT	CATTCTCAA	AAAGAAAAAA	AAAGCCATCT	CGAG		284

(2) INFORMATION FOR SEQ ID NO:1321:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 254 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1321:

GAATTCGGCC	TTCATGGCCT	AGGGAAATGT	GTGATTGGGA	AAGAGGCAGC	TTTTAAAAAT	60
GTGTCTGGCC	TTTGACCACG	CAATTTCACT	TTCCAGTATT	TATTCTAGGA	AAATACTCAT	120
ACTATTGCAA	AGTTTATATA	TAAAGATAGT	TATAACTGCA	TTGTTTATCA	TTTACAAAAA	180
GAAAACATCT	GAAAGCCCAA	CAAGACGGAA	CTGTTTATTC	CACATTGGCA	CATTCATACA	240
AGGCAATGCT	CGAG					254

(2) INFORMATION FOR SEQ ID NO:1322:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 352 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1322:

GAATTCGGCC	TTCATGGCCT	AGGCACAGAA	AAATTGAAA	GGATTGGTGG	TCGTACATCT	60
TGCAGCTCAC	TTAGTAGCTG	CATGCATGTA	GACCGGGTGG	TGTTGATGCA	GTGTTGACTT	120

GCTGGCATTG	GGGTGGGTGG	TAGCATGGTC	AAGCTGGCTG	AGTGATGGGA	TATTGTCTCA	180
GAGGTTGGTG	CAGGGAAACT	CTGTGGGTGT	GTCTAATGCA	AGGATAATGA	CAATGTCCTG	240
TCTGCCTGGT	CTTTGGGGGG	TCAGGTGGAG	ATGTCCTTTT	GGAAAGGCAG	CCATTCTCTT	300
TGAGTGCCA	GAGGGCATGG	TGCAGGCACA	TGGATTGAGT	GGAGGACTCG	AG	352

(2) INFORMATION FOR SEQ ID NO:1323:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 440 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1323:

GAATTCGGCC	TTCANGGCCT	ACTGTGTGTA	GAATTCTGTT	TTCTCATGAT	ATTGAAGACA	60
TTATTCCAGT	ACTTTGACTG	CTAGTATTGC	TGTTGAAAAG	TCTTAATTGC	CCTTCCTTTG	120
TAAGTAATAA	CCCTTTTATT	TGGCTGTGTT	AAGCCTTTTT	TTTTCTTCC	CATTTAGTGT	180
TTTGAGTTT	TGTATAATGT	ATTGAGGGCG	TTATTTTTTT	CATTCCATCA	TTTTATTTTT	240
TGTAATCCCA	CTTGGGATTG	TTTGGGCTTC	CTGGATCTGA	GGATAATAAT	AATGTCCTTG	300
AATAATTGTG	GAAAATTCTT	AACCATTATC	TCTTTGAATA	ATGCCTCTTA	TTTTCTCCTT	360
CTATAACTCT	AATTAGACAT	ATAGTCTATT	TTTCATGTTA	CTTATGCCTT	TTCATCCTTT	420
TTCGTCTCCA	CATACTCGAG					440

(2) INFORMATION FOR SEQ ID NO:1324:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 280 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1324:

GAATTCGGCC	TTTCATGGCCT	AATTGAATTC	TAGACCTGCC	TAAAATGCCC	AGTTACCTGA	60
AATTGTATAA	ATTCTTGCCA	AAAGTGTTTG	AACTTAATAC	AAACTTCCCA	TCTCTTACCT	120
CTTAGCACTG	TGCTCATCTT	GAGGGGACAT	AGTCCCAATT	TTGTATTTTA	TATAATACTG	180
TTAATGAATA	TGTGTAGACT	TCATATGGTT	GTGGGTAAAG	GAATACTGCA	TTCAGATAGA	240
AAAGATGCTA	TATAGCTAAG	TTGATCCGCG	GATCCTCGAG			280

(2) INFORMATION FOR SEQ ID NO:1325:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 281 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1325:

GTTTCCTTTT	CTACTTACAA	AGAAAATAAA	TAGAAATAGA	TTTACATGC	TTTATTTCTT	60
TGAGACAAGC	CATTGTAAAT	TGTTACTAGA	CTAAGTAGTA	GTATACCAGT	CATTGACTGG	120
TCTTTTCAAC	TCCACTCAAA	TTTGTAAGAA	GCAATTCCTC	TTATACTATC	ATCTTTTGTG	180

TTTTTTAAGG TTTTGTGTTG TGTGTTGTTT TTTGGCAAAA CATGATACAT TTCTCATGCT 240
 TGATCTAAAG AGGCTTTACA TAAGAGACAG AGTCGCTCGA G 281

(2) INFORMATION FOR SEQ ID NO:1326:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 348 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1326:

GAATTCGGCC TTCATGGCCT ACTATCTTGA ATGTCCAACCT CCAACTCCTA ATTATTTTAA 60
 AAATCTATGC ACTTCTTTCA CTTGAATTTC TATGCCCTCA TAGACTTTAC AGGCACATGT 120
 TCTATCACCA ATTAAGAGAA ATTTAACTTA CACATTTTAC AACTTATACA TGCAATTTGG 180
 CTGAGCTTAT ACAGCACAGA TCAACATTAC AATCAATTTA CTGCCATGTT AAAAAAAAAA 240
 TCAGTGAACA TTGTTCCGGCT GACCTAATTT TTTGAAATAA GTTGGCCATC AGTGTAAATTG 300
 ATTGAGCTAT CTGTACAACC CCCAACCTAC CTAAGCAAAG GGCTCGAG 348

(2) INFORMATION FOR SEQ ID NO:1327:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 680 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1327:

GAATTCGGCC TTCATGGCCT ACACGGACTT ACATCCTCAT TACTATTCTG CCTAGCAAAC 60
 TCAAACCTACG AACGCACTCA CAGTCGCATC ATAATCCTCT CTCAAGGACT TCAAACCTCTA 120
 CTCCCACTAA TAGCTTTTGG ATGACTTCTA GCAAGCCTCG CTAACCTCGC CTACCCCCC 180
 ACTATTAACC TACTGGGAGA ACTCTCTGTG CTAGTAACCA CGTCTCCTG ATCAAGTATC 240
 ACTCTCCTAC TTACAGGACT CAACATACTA GTCACAGCCC TATACTCCCT CTACATATTT 300
 ACCACTAACC CTCGAGACCA CTTTATATAA ATACTTATTT ATTTCTTATT TCCCCTGACT 360
 AGAAATATAA GCTCCATGGT AGCAGAGATT CTGATTGCTG CCTACTCTAT CCCCAGCTCC 420
 TATACTAGGC ACCATGAGTA CATGATCAGA AAATATTCAT GGAAAAAAT ACATAAATGT 480
 ATAACAATCT TCATTTGTGA GTAAGAAGAT GGGCTCTGGA ATCAGACTGC CTGGATTGAA 540
 ATCCTAATCT CATCACTTAC TAGTCATGGG ATATTTTACC TCAGTTTCAC TTTTGTAAAA 600
 TGAAGATAAT AATGTCTACC TTATAGTATT GTGAGGATTA AGTGAATTAA TGCACACAAA 660
 ATTAGGCCAT GAAGCCGAA 680

(2) INFORMATION FOR SEQ ID NO:1328:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 499 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1328:

GAATTCGCGG	CCGCGTCGAC	TGTCACCTGAG	CTTCTTGGCT	CTCTTATATA	TATTCTTTAT	60
TGTCATTTAC	TTTGGTGGAC	GAAGAGAAGG	AGAGAGTTGG	AATGGGGCCT	GGGTCCTCAG	120
CACTAGATTG	GCAAGACATA	TTGGATATTT	GGAACCTCCTC	CTTAAATTGA	TGTTTGTGAA	180
TCCACCTGAG	TTGCCAGAGC	AGACTACTAA	AGCTTTACCT	GTGAGGTTTT	TGTTTACAGA	240
TTACAATAGA	CTGTCCAGTG	TAGGTGGAGA	AACTTCTCTG	GCTGAAATGA	TTGCAACCCT	300
CTCGGATGCT	TGTGAAAGAG	AGTTTGGCTT	TTTGGCAACC	AGGCTTTTTT	GAGTATTCAA	360
GACTGAAGAT	ACTCAGGGTA	AAAAGAAATG	GAAAAAACA	TGTTGTCTCC	CATCTTTTGT	420
CATCTTCCTT	TTTATCATTG	GCTGCATTAT	ATCTGGAATT	ACTCTTCTGG	CTATATTTAG	480
AGTTGACCCA	AAGCTCGAG					499

(2) INFORMATION FOR SEQ ID NO:1329:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 200 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1329:

GAATTCGCGG	CCGCGTCGAC	CGCTGCCAAA	TGCTTCACTC	CTATCTACTC	TCCCGATTCC	60
TTATACTTCT	GAACCTCCTC	AACAGAAATC	TTGCTCTCTC	CCTAAATCCT	CAGTGCAACA	120
TACGTCCGCA	AAAACATAAT	GATCCCTCCT	CAGCCAGACA	GAAACTCTC	AACATATCAA	180
CACTCCCAAG	GCGTGGACAG					200

(2) INFORMATION FOR SEQ ID NO:1330:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 158 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1330:

GAATTCGGCC	AAAGAGGCCT	ACAGTCTTTT	TAGGCATGTT	TTTTTTTTTT	TTGGTGTGTG	60
TGATGACAGG	AATATGCATT	TTATCTGTAG	TGGTTTAA	TCCTGTATTA	AGCGTTGTTT	120
TCTTTTCAGA	CTGCAAAATT	CAAAATGGGG	CTCTCGAG			158

(2) INFORMATION FOR SEQ ID NO:1331:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 552 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1331:

GAATTCGCGG	CCGCGTCGAC	GATCATGAAG	CGCTCGGTAG	CCGCTCTGGCT	CTTGGTCGGG	60
CTCAGCCTCG	GTGTCCCCCA	GTTCCGCCAA	GGTGATATTT	GTGATCCCCA	TCCATGTGAA	120
AATGGAGGTA	TCTGTTTGCC	AGGATTGGCT	GATGGTTCCT	TTTCCTGTGA	GTGTCCAGAT	180
GGCTTCACAG	ACCCCAACTG	TTCTAGTGTT	GTGGAGGTTG	CATCAGATGA	AGAAGAACCA	240

ACTTCAGCAG	GTCCCTGCAC	TCCTAATCCA	TGCCATAATG	GAGGAACCTG	TGAAATAAGT	300
GAAGCATACC	GAGGGGATAC	ATTCATAGGC	TATGTTTGTG	AATGTCCCCG	AGGATTTAAT	360
GGGATTCAC	GTGAGCACAA	CATAAATGAA	TGCCAAGTTG	AGCCTTGCAA	AAATGGTGA	420
ATATGTACAG	ATCTTGTGTC	TAACTATTCC	TGTGAGTGCC	CAGGCGAATT	TATGGGAAGA	480
AATTGTCAAT	ACAAATGCTC	AGGCCCACTG	GGAATTGAAG	GTGGAATTAT	ATCAAACCAG	540
CAAATCCTCG	AG					552

(2) INFORMATION FOR SEQ ID NO:1332:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 760 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1332:

GAATTCGCGG	CCGCGTCGAC	CTCAGAACTA	TTTAAATTTA	GTAAATTAC	TATTATATTT	60
TATAGTAAAT	ATTGGTCCAC	TTTATAGCTC	AGAACCTAAA	AAGAGAATAT	GTACCCAAAC	120
TTCTCTATGT	TTACAACCAA	CCCAGAGTTT	AAGATTCTGA	ATTGTGCTTT	GTTTGTGTTAA	180
AAATTTAACC	AAGGGTCAGG	CACAGAGGCT	CATGCCTATA	ATCCCAGCGC	TTTGGGAGGC	240
CGAGGCGGGT	GGATCACTTG	AGTTCAGGAG	TTCCGGGACCA	GCCTGGCCCG	CATGGTGAAA	300
CCCCGTCTCT	ACTAAAAATA	CAAAAGTTAG	CCGGGTGTGG	TGGCATGTGC	CTGTGGTCCC	360
AGCTGCTTGG	GAGGCTGAGG	CAGGATAATC	NCTTGAACCC	AGGAGGCAGA	GGTTGCANTT	420
GCAGTGAGCC	GGGATTGTGC	CATTGTACTC	CAGCCTAGGC	AACAAGAGCG	AAACTCTGTC	480
TTAAAAAAA	AAAAGAAAAA	AAAATTAACC	AAGGTTCTCC	TTTCTCTAAA	TCTAGCAATT	540
TGTTCTATTT	TTGAGAAATA	AACTTAATAA	TTTAATACA	GATTTTAGCT	TTGGCTTTTT	600
TCTTACTTTT	TAGTTTCAA	ATTATTTTAT	GGTATTCCTA	CAAAGTAGAT	ACAAATTGTC	660
ATTCAGAATG	CACCTTTTGT	TTTCTGGGT	TTTTTGTGTT	GTTTGTGTTG	TTTTTCAGAA	720
AACTCATGGA	AAAGTACACT	GTTCACCTCA	GCATCTCGAG			760

(2) INFORMATION FOR SEQ ID NO:1333:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 579 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1333:

GAATTCGGCC	AAAGAGGCCT	ANAACTGGGT	AAGGAGCAAA	AAAAGTGACA	GAGGCCAGGC	60
GCGGTGGCTC	ATGCCTACAA	TCCCAGCACT	CTGGCCAAAT	ATTTGATTTT	AAATTCCTAT	120
TGTTACTGAT	TAAAAAATAA	AAAAATCTGG	ACCAGTTAAC	CTGGAGATTT	AGAGGCTATA	180
GACACAATT	AACATCCATA	CAGGCCTGTG	AACTTCATGC	AGAGAACAAA	CAAACAAACA	240
AAAACCTCTA	TTGAGAGTCT	CTCATTTTCT	CTTAGCCAAC	ACATTGAGAG	ACTTAGGGGC	300
CAGTTCTAGA	AGCTGCTTTT	ACCTCTAGAC	TCGGAGGGGC	AGGCCCTGTC	ACCGAAGGGA	360
GGAAACTCT	TCTTGGCTGT	CAGCCCGGAT	TGAAGCCACT	TCGCTTCCCC	TGGCCCCCAGC	420
TTTCTGTCAC	TCTTTTCACC	GTGTCTGACA	CACCAACCAC	TCAAATGAGC		480
AAACAATTCC	AGAAAAAAGA	ATCCGAGATA	AAGAATAACC	AACTAGGAGT	CTTTCCATTG	540
TAGCCTAAAC	CGTCGATTGA	ATTCTAGACC	TGCCTCGAG			579

(2) INFORMATION FOR SEQ ID NO:1334:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 521 base pairs

(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1334:

GAATTCGCGG	CCGCGTCGAC	CAACAAGGGC	AAAGGCCTTG	AGACACAAAC	CAACTGTGTG	60
GGTGTAAGG	TAAGAAAGGC	CAGTGAGGCC	AGCATGATGA	ACTGGGGGAG	CATGGTGGCT	120
GATTTGGTCA	GGAAGGGAAC	AGAAACCAGA	CCACTTGGGA	TCTTCTAGCC	AGAGTAAAGA	180
GACTGAGTTT	ATTCTATTG	TAATGGGGAG	CTATTGAGAG	AGGTTAATCA	TGGAAGTGAT	240
GTGACCTGAG	CTACACTCTT	AAAAGATGCC	TCTGGCTGCT	GTGTGGAGAA	TGAACCATGG	300
GGGCAAAAGC	AGAAACAAGA	AGACCACTTA	AGAGGCTCTT	GCAATAATTT	ATGTGAGAAG	360
AGTGATCATC	TTGACTAGGG	TGGTGGTGGT	AGAGGAGGTG	AGTGGTGGTC	AGGACTGAGA	420
GGAGCCAACA	GAATTTGCTG	GCTTGCTTGG	ATGTGGGTGA	TGAGGCAAAC	TGAGAATCCA	480
AGATGGCACC	AAGGCTTATA	CCCTGAGCAA	CTGAACTCGA	G		521

(2) INFORMATION FOR SEQ ID NO:1335:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 775 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1335:

GAAATTCGCG	GCCGCGTCGA	CGCTCTTGAG	TGAGACCCAA	CAAGCTGCTT	TTCACCAAAT	60
TGCAATGGAG	CCTTTTCGAAA	TCAATGTTCC	AAAGCCCCAAG	AGGAGAAATG	GGGTGAACTT	120
CTCCCTAGCT	GTGGTGGTCA	TCTACCTGAT	CCTGCTCACC	GCTGGCGCTG	GGCTGCTGGT	180
GGTCCAAGTT	CTGAATCTGC	AGGCGCGGCT	CCGGGTCCTG	GAGATGTATT	TCCTCAATGA	240
CACTCTGGCG	GCTGAGGACA	GCCCGTCCTT	CTCCTTGCTG	CAGTCAGCAC	ACCCTGGAGA	300
ACACCTGGCT	CAGGGTGCA	CGAGGCTGCA	AGTCTGCAG	GCCCAACTCA	CCTGGGTCCG	360
CGTCAGCCAT	GAGCACTTGC	TGCAGCGGGT	AGACAACCTC	ACTCAGAACC	CAGGGATGTT	420
CAGAATCAAA	GGTGAACAAG	GCGCCCCAGG	TCTTCAAGGT	CACAAGGGGG	CCATGGGCAT	480
GCCTGGTGCC	CCTGGCCCCG	CGGGACCACC	TGCTGAGAAG	GGAGCCAAGG	GGGCTATGGG	540
ACGAGATGGA	GCAACAGGCC	CCTCGGGACC	CCAAGGCCCA	CCGGGAGTCA	AGGGAGAGGC	600
GGGCCTCCAA	GGACCCCAGG	GTGCTCCAGG	GAAGCAAGGA	GCCACTGGCA	CCCCAGGACC	660
CCAAGGAGAG	AAGGGCAGCA	AAGGCGATGG	GGGTCTCATT	GGCCCCAAAG	GGGAACTGG	720
AACTAAGGGA	GAGAAAGGAG	ACCTGGGTCT	CCCAGGAAGC	AAACAGAGAC	TCGAG	775

(2) INFORMATION FOR SEQ ID NO:1336:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 155 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1336:

GTAGATTTAG	ATGTACAGAT	AGAGGTATGA	TTTTTTTAAA	AGGCACCTCA	GTATGGGTAA	60
TGTTATCTTT	CTTGTGTTTC	AGTGCACACA	CATACACACA	CACCATAGAT	GCAAAGTGTG	120
TAGAAAATGT	ATTGAAGGAT	ACCCAGGTAC	TCGAG			155

(2) INFORMATION FOR SEQ ID NO:1337:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 138 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1337:

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GAATTCGCGG CCGCGTCGAC ATTCATGCAA ATAAATATAT TACTAAAATG CTACCTGTTT    60
CTTTTCCTC TTTTCTTCC AGTTTGTAGT TATGAGATTG GGTCTTGCTA TGCTGCCCAT    120
GCTAGGCATG AACTCGAG                                         138

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(2) INFORMATION FOR SEQ ID NO:1338:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 249 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1338:

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GAATTCGCGG CCGCGTCGAC CTAAACCGTC AATTCTTCCC ATCTTAGGTT TCTCTCCTCG    60
GAAGCCTTCT CTTAGAATC GAACATTTTC TCTTCTGGCT TTGTTCCGAT GGTTCCTGGT    120
CTGTTTCTTT CTTGCTCCCT CGTGGCTTC ACTTCTGTTT TCTTTCCCAG AATGACGGTC    180
CTCTCATTTG ACCGTGTGCT TTCCGAAGCA CCTGTGCCA CCTTGTCTCG GCGATCCCGG    240
TTACTCGAG                                         249

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(2) INFORMATION FOR SEQ ID NO:1339:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 108 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1339:

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GAATTCGCGG CCGCGTCGAC AAAACAACAC ATTTTAAAGA TTACGTGCTT CTTGGTACAG    60
GTTTGTGAAT GACAGTTTAT CGTCATGCTG TTAGTGTGCA TCCTCGAG    108

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(2) INFORMATION FOR SEQ ID NO:1340:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 652 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1340:

GAATTCGGCC	AAAGAGGCCT	AATAGAAGGC	ATTCCATATT	TGTTCAATGA	ATTAACAAAT	60
GTTTTTCATA	TTAATTGTTC	TGATTTTAC	CTCCTTAGGC	CAGCCTTTAT	TATTGCCATA	120
TAAGCCTTCT	GGTAGTACCA	AGATGTATTA	TGTTCCACAA	TTAAGACAAA	TTCTCCATC	180
TCCGGATTCC	AAATCAGATA	CCACCGTTGA	AAGCTCCCAT	TCAGGATCCA	ATGATGCCAT	240
TGCTCCAGAC	TTCCCAGCTC	AGGTGCTAGG	CACAAGAGAT	GATGACCTCT	CAGCCACTGT	300
TAACATTAAT	CATAAAGAAG	GAATCTACAG	TAAGAGGGTA	GTGACTAAGG	CATCCTTGCC	360
AGTGGGAGAA	AAACCCTTGC	AGAATGAAAA	TGCAGATGCC	TCAGTTCAAG	TGCTAATCAC	420
TGGGGATGAG	AACCTCTCAG	ACAAAAACA	GCAAGAGATT	CACAGTACAA	GGGCAGTGAC	480
TGAGGCTGCC	CAGGCTAAAG	AAAAGAATC	TTTGCAGAAA	GATACTGCAG	ATTCCAGTGC	540
TGCTGCTGCT	GCAGAGCACT	CAGCTCAAGT	AGGAGACCCA	GAAATGAAGA	ACTTGCCAGA	600
CACTAAAGCC	ATTACACAGA	AAGAGGAGAT	CCATAGGAAG	AACGACCTCG	AG	652

(2) INFORMATION FOR SEQ ID NO:1341:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 817 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1341:

GAATTCGGCC	AAAGAGGCCT	ACGTGCCATT	TCTCTTCCAC	TATGAGAGGA	CCGATTGTAT	60
TGCACATTTG	TCTGGCTTTC	TGTAGCCTTC	TGCTTTTCAG	CGTTGCCACA	CAATGTCTGG	120
CCTTCCCAA	AATAGAAAGG	AGGAGGGAGA	TAGCACATGT	TCATGCGGAA	AAAGGGCAGT	180
CCGATAAGAT	GAACACCGAT	GACCTAGAAA	ATAGCTCTGT	TACCTCAAAG	CAGACTCCCC	240
AACTGGTGGT	CTCTGAAGAT	CCAATGATGA	TGTCAGCAGT	ACCATCGGCA	ACATCATTA	300
ATAAAGCATT	CTCGATTAA	AAAGAAACCC	AGCCTGGACA	AGCTGGGCTC	ATGCAAACAG	360
AACGCCCTGG	TGTTTCCACA	CCTACTGAGT	CAGGTGTNCC	TCAGCTGAAG	AAGTATTTGG	420
TTCCAGCCAG	CCAGAGAGAA	TATCTCNTGA	AAGTGGANTT	GCCAAGGCCA	TGTTAACCAT	480
TGCTATCACT	GCGACTCCTT	CTCTGACTGT	TGATGAAAAG	GAGGAACCTC	TTACAAGCAC	540
TAACCTTCAG	CCCATTGTAG	AAGAGATCAC	AGAAACCACA	AAAGGTTTTT	TGAAGTATAT	600
GGATAATCAA	TCATTTGCAA	CTGAAAGTCA	GGAAGGAGTT	GGTTTGGGAC	ATTCACTTC	660
ATCCTATGTG	AATACTAAGG	AAATGCTAAC	CACCAATCCA	AAGACTGAGA	AATTTGAAGC	720
AGACACAGAC	CACAGGACAA	CTTCTTTTCC	TGGTGCTGAG	TCCACAGCAG	GCAGTGAGCC	780
TGGAAGCCTC	ACCCCTGATA	AGGAGAAGCA	CCTCGAG			817

(2) INFORMATION FOR SEQ ID NO:1342:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 476 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1342:

GAATTCGGCC	AAAGAGGCCT	AGCACCATGG	ACAACCCACA	GGCTCTGCCA	CTCTTCCTAC	60
TCCTGGGGAT	CCTCACCTC	AGAGCCTCTT	CTGGACTTCA	GCAAACCAAC	TTCTCCTCTG	120
CCTTCTCTTC	AGACTCAAAG	AGCTCTTCCC	AGGGGCTGGG	TGTGGAAGTT	CCCTCCATCA	180
AACCTCCAG	CTGGAAAGTT	CCAGATCAGT	TCCTGGATT	AAAAGCCTCT	GCTGGAATCT	240
CTGATTCCAG	CTGGTTTCTT	GAGGCCCTGA	GTTCCAACAT	GTCTGGGTCC	TTCTGGTCAA	300
ATGTTTCTGC	TGAGGGCCAA	GATTTGAGCC	CGGTTTCCCC	CTTCTCTGAA	ACCCCTGGTT	360

CTGAAGTATT TCCTGATATT TCGGATCCTC AAGTTCCTGC CAAAGACCCC AAGCCTTCCT 420
TCACTGTATA GACCCAGCT TCAAACATTT CTACTCAAGT CTCCCATCTC CTCGAG 476

(2) INFORMATION FOR SEQ ID NO:1343:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 726 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1343:

GAATTCGCGG	CCGCGTCGAC	CAGGAAATGA	AGACATTGCC	TGCCATGCTT	GGAAGTGGGA	60
AATTATTTTG	GGTCTTCTTC	TTAATCCCAT	ATCTGGACAT	CTGGAACATC	CATGGGAAAG	120
AATCATGTGA	TGTACAGCTT	TATATAAAGA	GACAATCTGA	ACACTCCATC	TTAGCAGGAG	180
ATCCCTTTGA	ACTAGAATGC	CCTGTGAAAT	ACTGTGCTAA	CAGGCCTCAT	GTGACTTGGT	240
GCAAGCTCAA	TGGAACAACA	TGTGTAAAC	TTGAAGATAG	ACAAACAAGT	TGGAAGGAAG	300
AGAAGAACAT	TTCAATTTTC	ATTCTACATT	TTGAACCACT	GCTTCCTAAT	GACAATGGGN	360
TCATACCGCT	GTTCTGCAAA	TTTTCAGTCT	AATCTCATTG	AAAGCCACTC	AACAACCTCTT	420
TATGTGACAG	GAAAGCAAAA	TGAACTCTCT	GACACAGCAG	GAAGGGAAAT	TAACCTGGTT	480
GATGCTCACC	TTAAGAGTGA	GCAAACAGAA	GCAAGCACCA	GGCAAAATTC	CCAAGTACTG	540
CTATCAGAAA	CTGGAATTTA	TGATAATGAC	CCTGACCTTT	GTTTCAGGAT	GCAGGAAGGG	600
TCTGAAGTTT	ATTCTAATCC	ATGCCTGGAA	GAAAACAAAC	CAGGCATTGT	TTATGCTTCC	660
CTGAACCATT	CTGTCAATGG	ACTGAACTCA	AGACTGGCAA	GAAATGTAAA	AGAAGCACCA	720
CTCGAG						726

(2) INFORMATION FOR SEQ ID NO:1344:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 484 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1344:

GAATTCGGCC	AAAGAGGCCT	AGGGACAGCA	ATCAAGTTCT	AATGGTGCTC	ACTTTTTAGG	60
TCACCTTCAT	CACAGACTGC	TCCAAAGGCA	GAGCAATGTG	GAACGAACCA	GCACATTAC	120
TTAAGATCAA	AGTATGATAC	ATCTCTTTGA	GCGCCTCACT	TCACAATAGG	GATCCATTCA	180
TTGGCTTCCA	GATGATGTTT	ACAGTTCATG	TAACACTGAT	ACTGACTTTG	TTCTTTATGT	240
TTAGACAGCT	TCTCTGTCTA	TACTTCTCAG	AAACACCATC	AACCAGAACA	GAGCCACTTA	300
TTATCCACAA	AAGTTGCATC	AACCAGCTTA	CCTTCTGGGA	GGGATGGATG	GTACCCAAAT	360
ACTCAAACCTG	AATCCTATAG	TGTGGAGCAA	CCAAACAGAA	AACAGTCCAA	GGATTTCAGGA	420
AATGGTAAAA	ACATTTTAAA	TCTAAATAGT	AGTTATTTTC	ATTTTGTCT	GCTCCACCT	480
CGAG						484

(2) INFORMATION FOR SEQ ID NO:1345:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 125 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1345:

GAATTCGCGG CCGCGTCGAC ATGAGTTTAA TTTTTTTTTT TTTTTTTACA CTTTACATAG	60
AAATAGGATT ATGTGGGCTG GGCACAGGGA CTGACGCCTG TAATCCCAGC ACGTGGAGGC	120
TCGAG	125

(2) INFORMATION FOR SEQ ID NO:1346:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 760 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1346:

GAATTCGGCC AAAGAGGCCT AGACCCAGCG TACATACTGA ATGATCTCTA CATCTCAGAC	60
TACTGTGTGT GGATTCAGAA AGTCAAATCC AAAAAGTTGG CAGCTCTTGC AGAAGCCTTA	120
AAGGAAGTCT CCCTTACAAA GGCCAGCTG GGGTTAGAAC TGAAGAAGT AGAAGCAGCA	180
GCACTGCTTG TCCAGGAGGA AGAACTGCA TTAAGAGCAG CCCATTCAGT TTCTGGGCAG	240
CAGACACTTT GCTCCAGCTC TGAGGCAAGT GATTCGGAGG ACTCAGACAG CAGCGTGTCA	300
TCTGGAAACG AAGACTCAGG CTCAGATTCA GAACAAGATG AACTCAAAGA TAGTCCATCT	360
GAGACAGTCA GTTCTTTGCA AGGTCCCTTT CTTGAAGAAA GCAGTGCCTT TCTTATTGTT	420
GATGGTGGAG TACGCAGAAA CACAGCCATC CAGGAGTCTG ATGCCAGTCA GGGAAAGCCA	480
CTTGCTCTT CCTGGCCTCT TGGAGTGTCT GGGCCTCTGA TAGAGGAGCT TGGGAACAA	540
CTGAAGACTA CAGTTCAGGT TTCTGAACCC AAGGGCACCA CTGCTGTAAG CCGCAGCAAT	600
ATTGAGGAGA GAGACGGCTG TCAGACACCA AATAATTGAC TCTTAGGTGG TTTTATTCAT	660
TGTTGAGAAA TATGGTAGAT TGGGTTTCAT TTACCGAATG AGAATTCTTC ATTTTCACTT	720
TGTAATTTT CTTAGTATAT AGTCAGCCCA CACTCTCGAG	760

(2) INFORMATION FOR SEQ ID NO:1347:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 352 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1347:

GAATTCGCGG CCGCGTCGAC CATTTCGAGA GTCCGTCTTG TAAATGTTTG GCACTTTGCT	60
ACTTTATTGC TTCTTTCTGG CGACAGTTCC AGCACTCGCC GAGACCGGCG GAGAAAGGCA	120
GCTGAGCCCG GAGAAGAGCG AAATATGGGG ACCCGGGCTA AAAGCAGACG TCGTCCTTCC	180
CGCCCGCTAT TTCTATATTC AGGCAGTGGA TACATCAGGG AATAAATTCA CATCTTCTCC	240
AGGCGAAAAG GTCTTCAGG TGAAAGTCTC AGCACCAGAG GAGCAATTCA CTAGAGTTGG	300
AGTCCAGGTT TTAGACCGAA AAGATGGGTC CTTCATAGTA AGATACCTCG AG	352

(2) INFORMATION FOR SEQ ID NO:1348:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 251 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1348:

GAATTCGCGG CCGCGTCGAC TCTAGGTTTT CTGATTTTGA TGGTAATATG GTATTCTGGG	60
AAATATCTGT CCAAATTATC CTGATCTCTG AACTCCTGCT GTTGAGGTCA GTCACCTCAC	120
ACAATACCAT GATGACAGCT TTATCAAGCC AGATGCTTAG TCAGAGCTTT CCAAGACCCA	180
GCTTTGGTTT TATCAGCAA ATCCATCCTT CCCACCCCC ATACACACGC CAGTTTGAGA	240
CTCCTCTCGA G	251

(2) INFORMATION FOR SEQ ID NO:1349:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 309 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1349:

GAATTCGCGG CCGCGTCGAC CTAAACCGTC GATTGAATTC TGGACCTCCT GTGCAAGAAC	60
ATGAACCATC TGTGGTCTT CCTTCTCCTG GTGGCAGCTC CCAGATGGGT CCTGTCCCAG	120
GTGCAGGTGC AGCAGTCGGG CCCTAGACAG GTGAAGCCTT CGGAGACCCT GTCCCTCAGT	180
TGTACTGTCT CTCTCGCGC CATGAATGGT CATTACTGGA CCTGGATCCG GCAGACCCCG	240
GGAGGGAGAC TGGAGTGGAT TGGATCTGTC TATTATAATG GAAACAGAGT GTATCACCCC	300
TCCCTCGAG	309

(2) INFORMATION FOR SEQ ID NO:1350:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 553 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1350:

GAATTCGCGG CCGCGTCGAC AATTACTACC ATTGTTAAGT GTCTCTTTAA CTAAACTCAT	60
TGTTTAAAG TTTTCTCCCT CTCTGTTTCT AAATCCAAAT TTCTGCTCTG GAATATATGT	120
TAGAAGAGAT ACATTGTGTG GAATGTTTGC ATTTCTTTTA TGAAATGCAG TATCTTTTGG	180
GGAATATTAT GTAAATGAAA TACCAATTAT TTTAAAAGAG CATTTTTGTG TGACATAGTG	240
CTTTCACAAA CTAAACTGG AATTTCCTTC TTTAGTCTAT CTATATCTTT TGAAAATGTT	300
GACACAGCTA AGAAGAAGCT GCCTGTTTCT ATCTTAGATG GTCTGACCCT CAGCTACAAG	360
GTATATGCTG ATATTCCTTG TATGAACCGT GTTTCTGCT AACATTAAAA CATGCAAGTA	420
ATTGGTTACT TTCTAATTTT GTTTTGTGTT CATAGGTCCC ATGGCCCGTG GACATTGTTA	480
TAAGTTTGA ATGTCAAAAA ATTTATAATC AAGTGTCTTCT TCTCTTATG CAAATAAAGT	540
GGGCATCCTC GAG	553

(2) INFORMATION FOR SEQ ID NO:1351:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 209 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1351:

GAATTCGCGG	CCGCGTCGAC	TTTATTTTCAG	TGGATTCTCT	AGGATTTTCT	ATATAAAAGA	60
TGTCATCTGA	TAGAGTAGTT	TACTTCTTCG	TTTCCAACCT	GAATGGCTTT	TATTTTCATCT	120
CTTTCCTAAC	TGTCCTGGCT	AGAACCTCCT	TTACCACGTT	GAATGGAAGT	GGCAAGAATG	180
AACATCCTTG	TCTTGTTTCT	GATTTCGAG				209

(2) INFORMATION FOR SEQ ID NO:1352:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 525 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1352:

GAATTCGCGG	CCGCGTCGAC	AATGGCTTTT	CTTCCTTCCT	GGGTTTGTGT	ACTAGTTGGT	60
TCCTTTTCTG	CTTCCTTAGC	AGGGACTTCC	AATCTCTCAG	AGACAGAGCC	CCCTCTGTGG	120
AAGGAGAGTC	CTGGTCAGCT	CAGTGACTAC	AGGGTGAGAG	ACAGCATGTA	CATTATTAAT	180
CCCTGGGTAT	ACCTTGAGAG	AATGGGGATG	TATAAAATCA	TATTGAATCA	GACAGCCAGG	240
TATTTTGCAA	AATTGACACC	AGATAATGAA	CAGAATATTT	TATGGGGGTT	GCCTCTGCAG	300
TATGGCTGGC	AATATAGGAC	AGGCAGATTA	GCTGATCCAA	CCCGAAGGAC	AAACTGTGGC	360
TATGAATCTG	GAGATCATAT	GTGCATCTCT	GTGGACAGTT	GGTGGGCTGA	TTTGAATTAT	420
TTCTGTCTT	CATTACCCTT	TCTTGCTGCG	GTTGATTCTG	GTGTAATGGG	GATATCATCA	480
GACCAAGTCA	GGCTTTTGCC	CCCACCCAAG	AATGAGAGGC	TCGAG		525

(2) INFORMATION FOR SEQ ID NO:1353:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 286 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1353:

GAATTCGGCC	TTCATGGCCT	AGGCTCCTAA	AATAAATAAT	CCACATAATT	GTAAATGAAA	60
CACATCAAGG	ATTGAGTTA	ATAGCCTCTG	AGCAGCATT	ATATAGCCAT	TAGACTGGAG	120
TATTGTATT	CAAGAGGGCC	AGAGAACCCA	CCGCTAAAGC	CGTAGGGTGG	GAGGAACCCCT	180
GGATTGCAGC	TACATGGCTT	ATGTAGGGAG	TTTGTAACAG	CCCCAAGCTG	AAACCAGCTT	240
CTACACCCAT	GACTGTTGAG	TGATTGAATT	CTAGACCTGC	CTCGAG		286

(2) INFORMATION FOR SEQ ID NO:1354:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 572 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1354:

GAATTCGCGG	CCGCGTCGAC	CAACAAGAGC	ACTGGCCAAG	TCAGCTTCTT	CTGAGAGAGT	60
CTCTAGAAGA	CATGATGCTA	CACTCAGCTT	TGGGTCTCTG	CCTCTTACTC	GTCACAGTTT	120
CTTCCAACCT	TGCCATTGCA	ATAAAAAAGG	AAAAGAGGCC	TCCTCAGACA	CTCTCAAGAG	180
GATGGGGAGA	TGACATCACT	TGGGTACAAA	CTTATGAAGA	AGGTCTCTTT	TATGCTCAAA	240
AAAGTAAGAA	GCCATTAATG	GTTATTTCATC	ACCTGGAGGA	TTGTCAATAC	TCTCAAGCAC	300
TAAAGAAAGT	ATTTGCCCAA	AATGAAGAAA	TACAAGAAAT	GGCTCAGAAT	AAGTTCATCA	360
TGCTAAACCT	TATGCATGAA	ACCACTGATA	AGAATTTATC	ACCTGATGGG	CAATATGTGC	420
CTAGAATCAT	GTTTGTAGAC	CCTTCTTTAA	CAGTTAGAGC	TGACATAGCT	GGAAGATACT	480
CTAACAGATT	GTACACATAT	GAGCCTCGGG	ATTTACCCCT	ATTGATAGAA	AACATGAAGA	540
AAGCATTAA	ACTTATTCAG	TCAGAACTCG	AG			572

(2) INFORMATION FOR SEQ ID NO:1355:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 269 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1355:

GAATTCGCGG	CCGCGTCGAC	TGAAAAGTAG	GTTTTTGAAG	AGATATATTC	GAAATATATT	60
TTTTCACTTG	AAAAAAGTAA	AAATTTTTTT	CAAAAGCAAA	TAATTCAACT	CTAAAATTAT	120
ACTATTTCAA	CATTCTCATT	TATGTGAAAG	CATGTGATAA	ATGTTGCTG	CGTCAGAGAT	180
ATGAGAAACT	CCTTTGCATT	AGGTGGGCAT	TATTCATAGA	CTTCTACATG	AAAGAGAAGA	240
GAAATAAAAG	ATGCACCAGG	ATTCTCCAG				269

(2) INFORMATION FOR SEQ ID NO:1356:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 713 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1356:

GAATTCGCGG	CCGCGTCGAA	CCCAGCAAAA	TGGGGATCTC	CACAGTCATC	CTTGAAATGT	60
GTCTTTTATG	GGGACAAGTT	CTATCTACAG	GTGGGTGGAT	CCCAAGGACT	ACAGACTACG	120
CTTCACTGAT	TCCCTCGGAG	GTGCCCTTGG	ATACAACTGT	AGCAGAAGGT	TCTCCATTTC	180
CCTCGGAGTT	GACCCCTGGAG	TCAACTGTAG	CAGAAGGTTT	TCCGATTTC	TTGGAGTCAA	240
CCCTGGAGTC	AACTGTAGCA	GAAGGTTCTC	TGATTCCCTC	AGAGTCAACC	CTGGAGTCAA	300
CTGTAGCAGA	AGGATCTGAT	TCTGGTTTGG	CCCTGAGGCT	GGTGAATGGA	GATGGCAGGT	360
GTCAGGGCCG	AGTGGAGATC	CTATACCGAG	GCTCCTGGGG	CACCGTGTGT	GATGACAGCT	420
GGGACACCAA	TGATGCCAAC	GTGGTCTGTA	GGCAGCTGGG	TTGTGGCTGG	GCCATGTCAG	480
CTCCAGGAAA	TGCCTGGTTT	GGCCAGGGCT	CAGGACCCAT	TGCCCTGGAT	GATGTGCGCT	540
GCTCAGGACA	CGAATCCTAC	CTGTGGAGCT	GCCCCACAA	TGGCTGGCTC	TCCCATAACT	600
GTGGCCATGG	TGAAGATGCT	GGTGTATCT	GCTCAGCTGC	CCAGCCTCAG	TCAACACTCA	660
GGCCAGAAAG	TTGGCCTGTC	AGGATATCAC	CACCTGTACC	CACTAGACTC	GAG	713

(2) INFORMATION FOR SEQ ID NO:1357:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 925 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1357:

GAATTCGGCC	AAAGAGGCCT	AGAATAATGC	ATATACTGCC	ATGTCAGATT	CCTACTTACC	60
CAGTTACTAC	AGTCCCTCCA	TTGGCTTCTC	CTATTCTTTG	GGTGAAGCTG	CTTGGTCTAC	120
GGGGGGTGAC	ACAGCCATGC	CCTACTTAAC	TTCTTATGGA	CAGCTGAGCA	ACGGAGAGCC	180
CCACTTCCTA	CCAGATGCAA	TGTTTGGGCA	ACCAGGAGCC	CTAGGTAGCA	CTCCATTTCT	240
TGGTCAGCAT	GGTTTTAATT	TCTTTCCCAG	TGGGATTGAC	TTCTCAGCAT	GGGGAAATAA	300
CAGTTCTCAG	GGACAGTCTA	CTCAGAGCTC	TGGATATAGT	AGCAATTATG	CTTATGCACC	360
TAGCTCCTTA	GGTGGAGCCA	TGATTGATGG	ACAGTCAGCT	TTTGCCAATG	AGACCCTCAA	420
TAAGGCTCCT	GGCATGAATA	CTATAGACCA	AGGGATGGCA	NCACTGAAGT	TGGGTAGCAC	480
AGAAGTTGCA	AGCAATGTTT	CAAAAGTTGT	AGGTTCTGCT	GTTGGTAGCG	GGTCCATTAC	540
TAGTAACATC	GTGGCTTCCA	ATAGTTTGCC	TCCAGCCACC	ATTGCTCCTC	CAAAACCAGC	600
ATCTTGGGCT	GATATTGCTA	GCAAGCCTGC	AAAACAGCAA	CCTAAACTGA	AGACCAAGAA	660
TGGCATTGCA	GGGTCAAGTC	TTCCGCCACC	CCCGATAAAG	CATAACATGG	ATATTGGAAC	720
TTGGGATAAC	AAGGGTCCCG	TTGCAAAAGC	CCCCTCACAG	GCTTTGGTTC	AGAATATAGG	780
TCAGCCAACC	CAGGGGTCTC	CTCAGCCTGT	AGGTCAGCAG	GCTAACAATA	GCCCACCAGT	840
GGCTCAGGCA	TCAGTAGGGC	AACAGACACA	GCCATTGCCT	CCACCTCCAC	CACAGCCTGC	900
CCAGCTTTCA	GTCCAGCAAC	TCGAG				925

(2) INFORMATION FOR SEQ ID NO:1358:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 172 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1358:

GAATTCGCGG	CCGCGTCGAC	AAATAAACCC	AGCAACTTCA	TTCATTTGCC	TTATGTTTAT	60
TGAGGGCCTG	CTAGTGCTGG	GCACTGTTCT	AGGCCCTGGG	AATTTATTAG	TGAGCAAAAC	120
AGCAAAATCT	CTGTCCTCAT	GGAGCTCACA	ATATAGTAGG	GAACGACTCG	AG	172

(2) INFORMATION FOR SEQ ID NO:1359:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 770 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1359:

GAATTCGGCC	AAAGAGGCCT	AAGTCAGTGA	GGTGGAGTCC	GTTTTTGAGG	TCACGGGGCT	60
AGTAATTGGA	GCCTGGTTTA	GAACCAAGTC	AGTCTCATTC	CAGAATCCAG	AACCAAGTAT	120
TTGTAACCTG	TGCACTTGTC	TCCAAAGGGA	TCCAGCACTG	GGTTTTCTCA	TTTTTAATGC	180
ATCCATTCTT	TAAAGCCTCT	GTTACAGTTC	ACAAGGTGTA	CTTTTTAAAG	GAACACAGCA	240
CACAAATGTG	ACCGCTAGTG	GACAGCAGTG	GCAGCCCACT	TGGATGGCAG	AGCCTGGCAT	300

GCCGACTGGG	ACAGAAGCCC	CAGCACACGG	TGTGATGATG	GCGTCTCCAG	GCTGACCTCC	360
ATGGCCTCAG	GAATCAAAGT	CCTCGGTCTC	TTTCACGCGG	GGTTCAGAAA	GAAAACTCGG	420
CTATCTTACA	TCTCCTCTCC	CCTGTTTATT	TGACTAAAGT	GAAGTTCATG	TGGCTTGAGC	480
CTCGTTTCCT	GGGGAATCA	GCCTGGCTTA	GGATTCCATT	GTCTTCTGGG	ACTGGGAAGA	540
TGTGGAAGGC	TGACCTCACG	CCCAGCTGAA	GGTCACCTTC	CCAGACTCTG	AGCTCGGCTG	600
CCTTCTGCAT	CGCCACGGCT	GGAGGGCCTG	GCCCAGGCCG	TGGCTGCATG	CTGGCTTTCC	660
ACTGTCTCGG	TGTCCCTGCT	GCCTGTCAGT	AATGTGCCCA	GCACCTTCTG	GTGTCATGTC	720
CCCTCTTGTT	TGTGATTCTT	TCCTGAGCT	AGTCCATTTT	CTACCTCGAG		770

(2) INFORMATION FOR SEQ ID NO:1360:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 505 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1360:

GAATTCGGCC	AAAGAGGCCT	ACTCAGTGGA	AACCTTTAAA	CCCTAAAATC	CAGGAAAAGA	60
AAATAAATAC	ATTATCATGG	ACCTGAGGGA	TTTTTACCTG	TGGCTGCTC	TGATTGCCTG	120
TTTAAGGCTG	GATTCGCCAA	TAGCTCAAGA	ACTTATTTAC	ACTATTAGAG	AGGAATTGCC	180
TGAAAATGTG	CCCATAGGAA	ACATACCAA	GGATCTGAAC	ATTTCTCACA	TCAATGCTGC	240
CACAGGGACC	AGCGCCAGCC	TTGTCTACAG	ACTGGTTTCT	AAAGCTGGGG	ATGCCCTTTT	300
GGTGAAAGTA	TCCAGCAGCA	CTGGGGAAT	TTTCAACACC	TCCAACAGAA	TAGACAGAGA	360
AAAACCTCTG	GCTGGCGCCT	CATATGCTGA	GGAGAATGAG	TGTTTCTTTG	AACTTGAGGT	420
GGTGATCCTC	CCCAATGATT	TCTCAGGCT	GATCAAAATA	AAAATAATTG	TCAAGGATAC	480
CAATGATAAT	GCCCCAATC	TCGAG				505

(2) INFORMATION FOR SEQ ID NO:1361:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 553 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1361:

GAATTCGGCC	AAAGAGGCCT	AAATTTGTTC	TCTCCAAACC	AGAAGACCTT	AGGTACAGAT	60
GACCCCAGGG	AGCTGGGACA	GCAGGACAGA	NAGGGGAAGG	GACAGGTCCA	TATATAGGTG	120
TGTCATTGCA	GCCACTGCAA	TGAACATAAC	ATGCAAGAAA	TGTACAGAAT	GTGGTCCAGA	180
ATTGCCCACT	GGTGTCTGT	GCCCTGGTGG	ACCCACAGA	GGACTGCCCC	AGGCTTTCAC	240
TTTCCTTCCC	CATGGATTGA	GCAAGCTCCC	AGGGCAGGAT	GGGTGGCCAG	GAGGGGCAGA	300
ACGCTGGCGG	GGACGGGGAA	GCCAAGTGCT	CACAGGACCA	TCCACCACAG	CTGCAGCCAC	360
ACTGCAAGAC	GGCGGGGATG	GGACACACGG	TCTAGTTCTT	AGTTCTGCCT	CCTACAGGCA	420
GCCCCTGCTG	TCACTCCAGA	ACTAATTCTC	TGTGTGCCAC	TCACTCGCGT	GTGTGACACA	480
CAACAGATAC	ACATACATAG	ACACATACGT	ACATCTCCTC	CCCCAATCTC	ACCCTCTCAC	540
CAGCCCCCTC	GAG					553

(2) INFORMATION FOR SEQ ID NO:1362:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 855 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double

(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1362:

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GAATTCGGCC AAAGAAGCCT AGTCAACTTG ATCCAAACCT GTTGGTGAAG CAGCAGACTC      60
CACCATCTCA GCAGCAGCCA CTCCATCAGC CAGCCATGAA GTCTTTCCTT GACAATGTCA      120
TGCCCCACAC TACACCTGAG CTGCAAAAAG GGCCATCACC AATAAATGCT TTCAGCAACT      180
TCCCTATAGG CTTGAACTCA AACTTGAATG TAAATATGGA TATGAACAGT ATTAAAGAGC      240
CACAGTCCAG ACTAAGGAAG TGGACGACAG TGGACAGCAT TTCTGTGAAC ACATCTTTGG      300
ATCAAACTC CAGCAACAT GGTGCTATTT CAAGTGGTTT CAGGCTGGAA GAGTCTCCAT      360
TTGTNCCCTA TGACTTTATG AACAGCAGTA CTTCAACAGC CAGTCCTCCA GGTTC AATAG      420
GAGATGGCTG GCCACGTGCC AAATCGCCTA ACGGCTCTAG CAGTGTTAAT TGGCCACCAG      480
AATTTCTGCC CTGGTGAGCC ATGGAAGGT TATCCAAACA TTGACCCTGA AACTGACCCT      540
TACGTCACTC CTGGCAGTGT CATAACAAT CTTTCAATTA ATACTGTGCG GGAAGTTGAC      600
CACCTCAGGG ACAGGAACAG TGGGTCATCC TCATCCTTGA ACACCACGCT GCCTTCAACT      660
AGTGCCCTGT CATCCATTCG TGCCTCCAAC TACAACGTTT CCCTCAGCAG TACAGCACAA      720
AGCACTTCAG CCAGAAATAG TGATTCCAAA TTGACATGGT CTCCTGGTTC AGTTACAAAC      780
ACCTCTCTGG CTCATGAGCT GTGGAAGGTC CCTTTGCCAC CTAAAAACAT CACTGCTCCG      840
TCCC GCCACC TCGAG

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(2) INFORMATION FOR SEQ ID NO:1363:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 646 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1363:

```

GAATTCGGCC AAAGAGGCCT ACAAAAAGTA CATAGTAAGA CTAAGATACC AAGTTGTATA      60
CTAATATTTT TCAGGCCTTG GGCCTCAAAT ATATATATTT ATATATAATA CTCCAGTGTG      120
AACAGCAATT CGATGAAATG TAAATGTAT CTTTTTTTTT TTAAATCACA CACAAGTATT      180
CATAACCACA GGGTTCACCA GAAATCTAAA GCAAGGAGAC ACTCACTCAT ATAGAAATGG      240
AGTTACTCTT CCACAGATCG TTCTGATCAA AGGTTTTTGA ACAGAAATGA ATTAATGATT      300
TTTTTGTATA ATATCCAACA TGTCCACTAT CAAATACATT TAGTATGAAA AAACAGATGA      360
AGAAAAGGAA CATAATTAG GACAAAGTAT CTGGTTAAAA TGCTGTTTCA TTAATAAAG      420
CCCACTCTCC TTACTTTAGA GCTCCTTGGT GAAATGGAGG TGAGTTTGAT GGAGTGCAGT      480
TGATGACCAC TGAAAAACAC GAGCCCTTTC AACAATGTTG CAACACTGTT AGTTTTTGGT      540
TTAAACACAC ACACACACTC ACAAATGCTA AGTGTAACCT ACCAAATTCT GCGGTCAGCT      600
TTTCCAAGAA CTACTGGGGA AAGTTTCAAT GCTGCAAATC CTCGAG

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(2) INFORMATION FOR SEQ ID NO:1364:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 502 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1364:

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GAATTCGGCC TTCATGGCCT AATGGCTTAG CTGAAGGAAA TGCTCCAGAA ATTGGACTGT      60

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GTAAACCATC	AGTACAATAA	TACGCTGTGT	ATGTATGTGT	ATATAAAATG	AGAATTATGG	120
CATAATTGGA	GCATTTGCAT	TAATCAACAA	ACTCACATTG	AGACAAAAC	TAGTTTTACA	180
GCTGTCTTGA	TTAAAGCCAA	GTGTTCCATG	TTGCTGTGAA	GAATAGCCTC	TTTCAAATAC	240
TTTGAAAGT	AGTTACTTGG	AACTTGTA	AGGTATTACA	TTTTTATATT	TAAACACCTA	300
TAGAGATCTT	CAATTCCTTG	AGTCTGAGCT	TGTGGGTGGA	ATTCTAAATT	TGTATCATAA	360
TCTGTCTTTT	GTGAAACATT	TTGAAAATAT	GTATATATAA	TATTGTATAT	GCAAATTGTG	420
TTGTTTCACT	TGTAAAGGGA	AAAGGCTTAT	TTTTCTTTAT	ATTTCTGATA	ACTTGTTTTG	480
CATATGACCG	GCACTTCTCG	AG				502

(2) INFORMATION FOR SEQ ID NO:1365:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 197 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1365:

GAATTCGGCC	TTCATGGCCT	ACAGAAGTAC	GGGAAGGCCG	AGAAAAGAAT	AGAGAAGATA	60
GGGAAATTAG	AAGATAAAAA	CATACTTTTA	GAAGAAAAAA	GATAAATTTA	AACCTGAAAA	120
GTAGGAAGCA	GAAGAAAAAA	GACAAGCTAG	GAAACAAAAA	GCTAAGGGCA	TCGATTGAAT	180
TCTAGACCTG	CCTCGAG					197

(2) INFORMATION FOR SEQ ID NO:1366:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 314 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1366:

GAATTCGGCC	TTCATGGCCT	AGGCCTGGGG	TGGGACATTT	TGTTTGTGAG	AAGCCTGGAC	60
AAGAGGACGA	GGTGCACACC	ATGTCAGTCA	CGGATTGTG	AACTCACAGG	AGAGGGTTGG	120
ATAGGGCGTG	TGAACGTGAG	CCCGCGGTGT	AGACGATGTG	AAGCTGTGGT	AACGGGTGGG	180
CTGTGTATGG	CACCCGCTGC	TCGCAGGAGA	GGGTTGGATA	GGGCATGTGA	ACGTGAGCCT	240
GCAATGTAGA	CGATGCGAAG	TCGTGGTAAC	GGGTGGGCTT	GTGACGGCAC	CCGCTGCTTG	300
CAGCCTAACT	CGAG					314

(2) INFORMATION FOR SEQ ID NO:1367:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 250 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1367:

GAATTCGGCC	TTCATGGCCT	ACTGGTCCCA	TTTTTCTATT	GCAGTGGTCA	TCATTTTAT	60
TGATGTATAA	TAATATTGTA	TCATAAATCT	TCATAATATG	TGCTTCCAAA	GTTTTTCTA	120

ATTTTTCACT AACCTTTGAT TTGGTATTTA ATTTTITAGTT GTCAGAAGTT TTTAATATTT	180
GTATCATCAA AGCTATCAGG TTATTAAAAT TGACTTCTCA TTTAGACATA CTTAGGCCAT	240
GAAGGTCGAG	250

(2) INFORMATION FOR SEQ ID NO:1368:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 261 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1368:

GAATTCGGCC TTCATGGCCT AGTGAGAGCA CCACACAAAG GACAGGAAAA ACACCAGCAA	60
TACATCAGCT TTACACAGCA GGCAAGTTTC CTGCTCTCTA CAAGTACAGA TGGAAGTTGT	120
CTTGTGAATT AACATCCTGA CTAATTTTGT TGATCATCAC ATTTTTCCT CATGAGAGAA	180
ATAATAGTGT TTTATAGGCT CCTGAGAATA GGTCTACTAA AGTCATCGAG ATCTGGGTTT	240
AAATGACACT TCATGCTCGA G	261

(2) INFORMATION FOR SEQ ID NO:1369:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 408 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1369:

GAATTCGGCC TTCATGGCCT AGTTTTTGTT TGTGTTGTTG TTTGTTTTTT GGCAAGAACA	60
GTTAGGAACC AGATCACAGT GAGGTATAGA GTGAATGAGA GTTGAGAATG TAAAGACAAT	120
GGATATAGAT CACTATTTCA GGAAGCTGTT TGTGAGAGGG AGGAGAAAAA TAAACAGTT	180
ACTGAGCAAT AGGGTGGTTG GTAAGGGGGA GGGATTTTTT TCTGAAAGAT GGGAGAAATT	240
TTAACATACT TAAATTTGAT GGGATAAGCC ATGCACTTAT AGGCATTGAG TCAATATATA	300
TTTCACAAAT GAATGAAGAT AAATTAGGGA GAGGTTAATT GGAGATTTTA GGAGAGAGGG	360
AATAATTGAT CATGTAAAGT CATTGATAAG GTGGGAGCAG AACTCGAG	408

(2) INFORMATION FOR SEQ ID NO:1370:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 369 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1370:

GAATTCGGCC TTCATGGCCT ACTCGATTAC AGGTCCTCCG CCTGCCATGC AGAAAGTCAT	60
GTATAAGGGA CTCGTCCCG AGGATAAAAC ATTGAGAGAA ATAAAAGTGA CCAGTGGGGC	120
CAAGATCATG GTGGTTGGCT CCACCATCAA TGATGTTTTA GCAGTAAACA CACCCAAAGA	180
TGCTGCCGAG CAGGATGCAA AGGCCGAAGA GAACAAGAAG GAGCCTCTCT GCAGGCAGAA	240
ACAACACAGG AAAGTGTG ATAAAGGAAA ACCTGAAGAT GTGATGCCAT CTGTTAAGGG	300

GGCCCCAGGAG CGCCTGCCAA CGGTACCGCT GTCCGGCATG TACAATAAAT CTGGAGGAAA
AGTCTCGAG

360

369

(2) INFORMATION FOR SEQ ID NO:1371:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 443 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1371:

GAATTCGGCC AAAGAGGCCT ATTTTTTTTT TTTTAACTG ATAGATGGTG CAGCATGTCT	60
ACATGGTTGT TTGTGCTAA ACTTTATATA ATGTGTGGTT TCAATTCAGC TTGAAAAATA	120
ATCTCACTAC ATGTAGCAGT ACATTATATG TACATTATAT GTAATGTTAG TATTTCTGCT	180
TTGAATCCTT GATATTGCAA TGAATTCCT ACTTTATTAA ATGTATTGA TATGCTAGTT	240
ATTGTGTGCG ATTTAACTT TTTTGCTTT CTCCCTNTTT TTGGTTGTGC GCTTTCTTTT	300
ACAACAAGCC TCTAGAAACA GATAGTTTCT GAGAATTACT GAGCTATGTT TGTAAATGCAG	360
ATGTACTTAG GGAGTATGTA AAATAATCAT TTTAACAAA GAAATAGATA TTTAAATTT	420
AATACTAACT ATGGGATCTC GAG	443

(2) INFORMATION FOR SEQ ID NO:1372:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 770 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1372:

GAATTCGGCC AAAGAGGCCT ACTTCCGGCT GGAGCTGCTG GCGCGGGGAC CTGGGGCGGT	60
TAATTTGGAG TGGCCCTGG AGTCAGTTTC CTACACCATC CGAGGCCCA CCCAGCACGA	120
GCTACAGCCT CCACCAGGAG GGCCTGGAAC CCTCAGCCTG CACTTCTCA ACCCTCAGGA	180
AGCTCAGCGG TGGGCAGTCC TAGTCCGAGG TGCCACCGTG GAAGGACAGA ATGGCAGCAA	240
GAGCAACTCA CCACCAGCCT TGGGCCCCAGA AGCATGCCCT GTCTCCCTGC CCAGTCCCCC	300
GGAAGCCTCC AACTCAAGG GCCCTCCACC TGAGGCAGAT CTTCTAGGA GCCCTGGAAA	360
CTTGACGGAG AGAGAAGAGC TGGCAGGGAG CCTGGCCCCG GCTATTGCAG GTGGAGACGA	420
GAAGGGGGCA GCCCAAGTGG CAGCCGTCCT GGCCAGCAT CGTGTGGCCC TGAGTGTTC	480
GCTTCAGGAG GCCTGCTTCC CACCTGGCCC CATCAGGCTG CAGGTCACAC TTGAAGACGC	540
TGCCTCTGCC GCATCCGCCG CGTCTCTGCG ACACGTTGCC CTGCAGGTCC ACCCCCACTG	600
CACTGTTGCA GCTCTCCAGG AGCAGGTGTT CTCAGAGCTC GGTTCCTCCG CAGCCGTGCA	660
ACGCTGGGTC ATCGGACGGT GCCTGTGTGT GCCTGAGCGC AGCCTTGCTT CTTACGGGGT	720
TCGGCAGGAT GGGGACCCTG CTTTCTCTA CTTGCTGTCA GCTCCTCGAG	770

(2) INFORMATION FOR SEQ ID NO:1373:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 597 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1373:

GAATTCGGCC	AAAGAGGCCT	AGTCTCTTTG	AAGATCTCTA	GGAACCTGCT	TTATGAATCT	60
TCATGCTCCT	GTGTTGGATG	CATATACATT	TAGGATAGTT	AGGTGTTCTT	TTTGAATTGA	120
AACCTTTTACC	ATTATGTAAT	GCCCTTGTTT	GTCTTTTAAA	ATTTTGTGTTG	GTTTAAATATC	180
TGTTTTGTCT	AAAATTAGAA	TTTCAGCCTC	TGCTTTTTTT	CTGTTTTCCA	TTTGCTTAAT	240
AAATTTTTCT	TCATTCCCTT	ATTTTATGCC	TATGGGTGTC	ATTGGATGTG	AGATTCATCT	300
CTTGAACACT	GTACTACTGG	TTCTTGCTTT	TTTACTCAGC	TTGTCACTCT	GTGTCTTTCA	360
ATTGGGCATT	CAAGGCTAGT	GTTGATATGT	GTGAATTTGT	TTCTGTCATC	ATGTTATTAG	420
TTGTTTATTA	TGCTGACTTG	TTTGTGTGGT	TTCNTTATAG	TGTTACTGGT	CTGTGCACTT	480
AAGTGTGTTT	TTTATAGTAGC	AATATTTTCT	TTTCATATGT	AGTGCTTTAT	GCGAGGTATT	540
TTGCAAGGAT	TTTCTGAATN	NTCNGAATTT	TTATGTGGGC	TAAACTAGGG	GCTCGAG	597

(2) INFORMATION FOR SEQ ID NO:1374:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 459 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1374:

GAATTCGGCC	AAAGAGGCCT	AGCCTCCCAG	TGTGAGCCAC	CGCACCCAGC	CTGGATTGTT	60
GAATTCAATG	CTTGGGTCAC	CTCCAGATTC	ATTTTCACAG	TCTTTCATGT	TTTGGTCATA	120
TGACATTGTA	TTTGCTGCC	ATATGACTGA	TCTTTTTTTG	TTAAATGTGA	GATACTTGTT	180
AAAAAATGTT	TAGCAATGAA	TTGAGGCCTA	GTAGCATGTT	ATCTTGCTGC	AGAAGAGATG	240
GGAGTCTACT	TCTGGGGGAT	GGTCAGGGGT	CCTCCATACA	GGCTGCAATT	GAAGTCGTCG	300
GTGCAGGCTC	AGTCCCTACA	AAGGCCAGGG	TATTTCTGT	CCACCTTTAT	TCTGATGCAT	360
GACTCTTCTG	GGTCTCAACC	AGAGCCAGTG	GACTTCAGTA	TGGGTCGCTT	TCATTGGCAG	420
ACCTCAATC	CACTTGTTTT	CCATCTAATC	CCACTCGAG			459

(2) INFORMATION FOR SEQ ID NO:1375:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 531 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1375:

GAATTCGGCC	AAAGAGGCCT	AATGGATCTC	ATGTGCAAGA	AAATGAAGCA	CCTGTGGTTC	60
TTCTTCCTGC	TGGTGGCGGC	TCCAGATGG	GTCTGTCC	AGCTGCAGCT	GCGGGAGTCG	120
GGCCCAGGAC	TGGTGAAGCC	TTCGGAGACC	CTGTCCCTCA	CCTGCTCTGT	CTCTGGTGGC	180
TCCATCAGCA	GCAATAGTTA	CTCCTGGGGC	TGGATCCGCC	AGCCCCCAGG	GAAGGGGCTG	240
GAATGCATTG	GGAGCATCTC	TTACAGTGGG	AGCACCTACC	TCACCCCGTC	CCTCAAGAGT	300
CGAGTCACCG	TTTCCGTAGA	CCCGTCCAAG	AACCAGTTAT	CCCTGAGGCT	GAGCTCTGTG	360
ACCGCCGCAG	ACACGGCTGT	GTATTATTGT	GCGGGGGGGT	CTCCGGGCGA	TTATTCTTAT	420
GAGAATAGTG	ATTACCCCGA	CCCCCGTAC	TATTTAGACT	CCTGGGGCCG	GGAACCCCTG	480
GTACCCGTCT	CCTCAGCTTC	CACCAAGGGC	CCATCCGTCT	TCCCCCTCGA	G	531

(2) INFORMATION FOR SEQ ID NO:1376:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 661 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1376:

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GAATTCGGCC AAAGAGGCCT AATGACTCAG AAGAAAGAAG TTACTTTACC ATTTTGTGTTT      60
ACACCATTTA AACTGCTTTC TGATTCCAAA CAGTTCAACA TTTAAGAAA AGCAAGATCT      120
TATATAAAAC ACAGAAAGTT TGATGAAGTG GTCTCCCTTT GCAAGGAGCT AATTCATCTT      180
GCATTGAAAG GATTGTCCTA TTATCACACA TATGACAGAT TCTTTTGGG CGTCAATGTT      240
GTTATTGGTT TTGTGGGATG GATATCTTAT GCCTCTTTGT TGATCATCAA GTCTCATTC      300
AACCTTATAA AAGGTGTTAG TAAAGAAGTG AAGAAACCAA GCCATCTCCT GCCTTGTAGT      360
TTTGTAGCTA TTGGCATTTC AGTAGCATTT TTCTGCTGA TTCAAGCCTG TCCCTGGACA      420
TATTATGTAT ATGGTTTGTT GCCACTGCCA ATATGGTATG CGGTTCTAAG AGAATTTCAA      480
GTTATTCAGG ACCTTGTTGT ATCAGTGTG ACCTATCCTC TGAGCCATTG TGTGGGTAC      540
CTGTTAGCCT TTACCCTGGG AATTGAAGTA TTAGTTCTCA GTTTTTTCTA CCGCTATATG      600
CTTACCGCTG GACTTACTGC CTTTGCAGCT TGGCCATTTC TCACTCGGCT GTGGACTCGA      660
G                                                                                   661

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(2) INFORMATION FOR SEQ ID NO:1377:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 117 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1377:

```

GAATTCGCGG CCGCGTCGAC AAAAAAGGTA AAGATGTTGC TGTATGCAA ATGGACCCAA      60
GTTATGTTTA TTCAAGTTGC CTGTAGAAAC TTAGTGCTCT ATAGCCCAA ACTCGAG      117

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(2) INFORMATION FOR SEQ ID NO:1378:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 118 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1378:

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GAATTCGCGG CCGCGTCGAC CTAAATTTA AACTGGCCT GGTTCGCTT TTTTATCAAG      60
AGAGCTTAAC AGATAAAAAA TGAAATTAGT CTATTTTCTA CTTGCCAGCA GTCTCGAG      118

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(2) INFORMATION FOR SEQ ID NO:1379:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 229 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1379:

GAATTCGCGG	CCGCGTCGAC	ATTTTATATA	ATATTTTAAA	TAAGTTTGTG	TACAAAACAA	60
AGATTTGACT	GCATTTTGAT	TGTGACCCCG	TTGCATGAAG	TCAGGTGTGG	AGTTTTCAC	120
TTGTGGTATC	ATGTTGCTGC	TGCTCAAGAA	GTTTCTGATT	TTGGAACATT	TTGGATTTTG	180
GATTTTCACA	TTGGGGATAC	CTAATGTGAG	AGAGACTAGG	CCACTCGAG		229

(2) INFORMATION FOR SEQ ID NO:1380:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 140 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1380:

GAATTCGCGG	CCGCGTCGAC	GTTGGGGACA	TGGTGGGTCT	GAGAAAAGTG	TTGCCCCGAA	60
CTTTCTATCT	GGCATTCCCT	GCGGAGGAAA	TAGAATGCGC	GCTCTCCGAC	AGCATTCCT	120
GTAACATCCG	CGAACTCGAG					140

(2) INFORMATION FOR SEQ ID NO:1381:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 99 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1381:

GAATTCGCGG	CCGCGTCGAC	TCTCAGAAGA	GGTTTGTTTA	ACTTCTATAA	ATACAACCAC	60
TTCATGCGTT	GGCATCTCCT	TGAGAAAAGG	CTTCTCGAG			99

(2) INFORMATION FOR SEQ ID NO:1382:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 442 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1382:

GAATTCGGCC	AAAGAGGCCT	AGTTTAAGTG	CTGTGGAGTA	GTATATTTCA	CTGACTGGTT	60
GGAAATGACA	GAGATGGA	GGCCCCCAGA	TTCCTGCTGT	GTTAGAGAAT	TCCCAGGATG	120
TTCCAAACAG	GCCCACCAGG	AAGATCTCAG	TGACCTTTAT	CAAGAGGGTT	GTGGGAAGAA	180
AATGTATTCC	TTTTTGAGAG	GAACCAAACA	ACTGCAGGTG	CTGAGGTTTC	TGGGAATCTC	240
CATTGGGGTG	ACACAAATCC	TGGCCATGAT	TCTCACCATT	ACTCTGCTCT	GGGCTCTGTA	300
TTATGATAGA	AGGGAGCCTG	GGACAGACCA	AATGATGTCC	TTGAAGAATG	ACAACCTCTCA	360

GCACCTGTCA TGTCCTCAG TAGAACTGTT GAAACCAAGC CTGTCAAGAA TCTTTGAACA 420
CACATCCATG GCAAACCTCG AG 442

(2) INFORMATION FOR SEQ ID NO:1383:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 501 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1383:

GAATTCGGCC AAAGAGGCCT ATTCAGGTGT TTTCATTGG TGATCAGGAC TGAACAGAGA 60
GAACTCACCA TGGAGTTTGG GCTGAGCTGG CTTTTTCTTG TGGCTATTTT AAAAGGTGTC 120
CAGTGTGAGG TGCAGCTGTT GGAGTCTGGG GGAGGTTTAA TACAGCCTGG GGGGTCCCTG 180
AGGCTCTCTT GTGCAGCCTC CGGGTTCATC TTTAGCAACT ATGCCGTGAG TTGGGTCCGC 240
CAGGCTCCAG GGAAGGGGCT GGAGTGGGTC TCAAGTATAA GTGACATTGG TGACACCAGA 300
TACTACGGAG ACTCCGTGAG GGGCCGATC ACCATCTCCA GAGACAATTC CAAGAACATG 360
TTGTATTGG ACATGAACAG CCTGAGAGCC GAGGATACGG CCGTGTATTA TTGTGCGGCA 420
AGGGATTGGT ATCATACTCG TGGCTATTAC TGGTACTACT TTGACTTCTG GGGCCAGGGA 480
TCCTTAGTCA GCGATCTCGA G 501

(2) INFORMATION FOR SEQ ID NO:1384:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 634 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1384:

GAATTCGGCC AAAGAGGCCT ACTTCAATAT TCTGTTACGG GTTTTTTTAG TCTTTTTTTC 60
TCTTTGCTTT CCTGTGTTGG AATTTTCTAT TTCTATATAC TCAAGTTCAG AGATTCTTTC 120
CTTTTCCATA TCCTGTCTAC TAGTGAGCCC ATCCAAGGCA TTGTTCATTT CTGTTACAGT 180
GTTTTGATCT TTAGTATTTT TTTTTCATC TTCATTACAC TTTCTCTCTG CTAACATTGC 240
CCATAAGTGC TTATATGCTG TATACTTTAT CTGTTGATCA TATTGTGTTT AAATTCCTAA 300
TCTGATAATT CAACATCTCT GACATGCTCT GTTCTGGTTC TGATACTTGT TGTCAAACTG 360
TGGTTTTTTT TCTTTTAGAG TGGCTTTTAA TTTTCTTTT GTTTTTTGTT TTTTTTTTGG 420
ATAGTTGGAC ATGACGTACT AGATAAAGC AACTACTGTA AATAGACCTT TAGGAATGTG 480
GTGGAAGAT GTGAGAGGAA GAAAAGCATT CTGTAGTCCT GTTAGGTTTC AGTCTTTTAA 540
CCCATTTATG CTTAGTGTTT TATTACTGGA ACGTAGGCA TGTGGAAGTT ATTTATATCC 600
TACTGCTAAA GGTATCACC AAGCTGTACT CGAG 634

(2) INFORMATION FOR SEQ ID NO:1385:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 700 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1385:


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GAATTCGGCC AAAGAGGCCT ACTCAAGTTC AAGGAAAATG AAGACAAAAA GTGATATGAT      60
GGAAGAAAAAC ATAGATACAA GTGCCCAAGC AGTTGCTGAA ACCAAGCAAG AAGCAGTTGT      120
TGAAGAAGAC  TACAATGAAA ATGCTAAAAA TGGAGAAGCC AAAATTACAG AGGCACCAGC      180
TTCTGAAAAA GAAATTGTGG AAGTAAAAGA AGAAAATATT GAAGATGCCA CAGAAAAGGG      240
AGGAGAAAAAG AAAGAAGCAG TGGCAGCAGA AGTAAAAAAT GAAGAAGAAG ATCAGAAAAGA      300
AGATGAAGAA  GATCAAAACG AAGAGAAAGG GGAAGCTGGA AAAGAAGACA AAGATGAAAA      360
AGGGGAAGAA  GATGGAAAAG AGGATAAAAA TGGAAATGAG AAAGGAGAAG ATGCAAAAAGA      420
GAAAGAAGAT  GGAAAAAAG  GTGAAGACGG AAAAGGAAAT GGAGAAGATG GAAAAGAGAA      480
AGGAGAAGAT  GAAAAAGAGG AAGAAGACAG AAAAGAAAACA GGAGATGGAA AAGAGAATGA      540
AGATGGAAAA  GAGAAGGGAG ATAAAAAGA  GGGGAAAGAT GTAAAAGTCA AAGAAGATGA      600
AAAAGAGAGA  GAAGATGGAA AAGAAGATGA AGGTGGAAAT GAGGAAGAAG CTGGAAGAAGA      660
GAAAGAAGAT  TTAAGAAGAG AGGAAGAAGG AAAGCTCGAG      700

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(2) INFORMATION FOR SEQ ID NO:1386:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 127 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1386:

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GAATTCGCGG CCGCGTCGAC CTTTAGTGTG TCTTTTCATT CTCTAAAAAG TGTCCTTTGC      60
AGAGAAAAAA AAAATTTTAA TTTTGATGAA ATCCAACCTA TCAATTTTTC TTCTGTGGCC      120
CCTCGAG      127

```

(2) INFORMATION FOR SEQ ID NO:1387:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 128 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1387:

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GAATTCGCGG CCGCGTCGAC CTCTGTTTCTG TCGTTTTGCT GAATATTTAT TAGCATTCCA      60
TCACTTTGTG TTTAATTAAT AGAAGTTGAG TTCAACAACAT GTTTTAAAAA TTCACACAAA      120
TACTCGAG      128

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(2) INFORMATION FOR SEQ ID NO:1388:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 816 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1388:

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GAATTCGGCC AAAGAGGCCT AGTTTCTTTT GCTCTACATC TTCACCAGTA TTTGGTGTTA      60

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TCAGTGTTCT	GAATTTTGTC	CATTCTGATA	GGTGTGTAGA	GGTATCTTAT	AATTTTAATT	120
TGTGTTTCTC	TGATGCCATA	TGATGTGTGG	GACATCTTTT	CATATGCTGA	ATTGCCATCT	180
GTATATCTTT	GGTGAGGTGT	CTGTTAAGGT	TGTTGGCCAA	TTTTTTAATT	GGGTTGTTTG	240
TTTTCTTGTC	GAATTTTAAG	AGTTCCTTAC	ACTGTCTCTG	TCTGTCTTGT	CTGTCTGTCT	300
GTCTGTCTGT	NGAGACAGAG	CCTCGCTCTG	TCACCCAGGT	TGCAGTACAG	TGGCACAGTC	360
TTGGCTCCCT	GCAACCTCTG	CCACCTGGGT	TCAAGTGATT	CTCCTGCGTC	AGCCTCCCGA	420
GTAGCTGGGT	TTATACCCGT	GCACCACCAC	ACCTGGCTAA	TTTTTGTTAT	TTTAGTAGAC	480
ACGGGGTTTC	ACTANGTTAG	CCAGGCTGGT	CTCGACCTCC	TGACCTCAGG	TGATCCACCC	540
ACCTTGGCCT	CCCAAAGTGC	TGGGANGNGA	GCCACCACAC	CCAGCCTCCT	TACACATTTT	600
AGTTAATAGT	TCTTTATCAG	ATGTGTCTTA	TGTAAATATT	TCCTCCCTAT	CTGTGCTTGG	660
TCTTTTCATA	CTCTTGACAT	TGTCTTTTGC	AAAAGACAAC	AATTTTTAAG	AAACAAGTAG	720
ACAATTTTAA	TGAAGTCTGG	CTTATCAGTT	CTTTTCTTCA	TGGTTGGTAC	CTTTGGTGCC	780
GTATCTAAAA	GTCATCACCA	AACCCAAGAA	CTCGAG			816

(2) INFORMATION FOR SEQ ID NO:1389:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 163 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1389:

GAATTCGCGG	CCGCGTCGAC	CTAAACCGTC	GATTGAATTC	TAGACGAACT	ATATGTTTAA	60
GCAAAAACAA	AAATAAAAT	CCTCAAAAAA	AGTAATATCA	GAGTTTTAAT	TTCAACCAGC	120
TGGCACAACA	ATGAAAGTGT	CAGACTTTCT	GAAAGTACTC	GAG		163

(2) INFORMATION FOR SEQ ID NO:1390:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 286 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1390:

GAATTCGGCC	TTCATGGCCT	AAAACCCTCA	AAAATAAATT	AGAATCCAGC	ACTGCTACAA	60
TATATTATCT	AAAATGTCTA	ATTCTCAAAA	ATATGAGTGA	TGCAAAGAAA	CAGGAAACAG	120
TGAAACACAG	AGGAAAAAAC	AGTGACTAGA	AACTGACTTA	AGAGTAAGCC	CAGATGTATT	180
TGGGAGCCAG	AGCCTTCAAA	GTAGCTATTA	AATATGTTTG	AAAAAATTAA	GGGAAAATAT	240
GACAATGACT	CAAAAATAAG	GACTCTAAAT	ATAGAAATGG	GAGCTG		286

(2) INFORMATION FOR SEQ ID NO:1391:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 392 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1391:

GAATTCGGCC	TTCATGGCCT	ACTTTTAAGG	GCTTGAAGT	TTCAAAACCA	CAGTCTGCAT	60
GTGACAGGTG	CTCACTGCTG	TGCGTTGGC	CGCTGGTTCT	AGGCCTCTGC	TGGAGTGTGT	120
GATCTGCTTT	CTGACGGCAG	GCGGTTACA	TGGGTGTGCT	TTAATCTTAC	GTCTCCGTCC	180
TCTTTTTC	CTGAGAGTGC	TGGTCTCAAG	GACAGTGGAG	ATGAGAGAAT	TGGAATATCG	240
CATAATGTCT	CATCTGTTTT	ATCTCTTGCT	ACAAACATCA	CAATCTCAAA	ATAACAATGG	300
CAGTACAACT	GCCACCTATA	TCATTACTGA	AAACAGTGAA	GATATTTTTT	GCCTAAGTCT	360
TCCCATTCTG	TGTAGTTATG	CAGAGTCTCG	AG			392

(2) INFORMATION FOR SEQ ID NO:1392:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 286 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1392:

GAATTCGGCC	TTCATGGCCT	AGTAATCTTT	CCCCCAGTT	TTTGATGAA	GAAACTAACA	60
CTGAAGGGGC	GAGGTGGCCT	CCCAGGCTCA	GAGGGTGATT	CAGAATCCAG	GCCTGGTGTT	120
CCTTCCACAG	TACCAAAGCG	CCACACATTA	GTTGTCTTGT	AGATTTTCCA	CACITCAGGG	180
AGAATGCCAA	AGTATCTTTG	CCTTGACAC	ACTACCTGTT	CAACACTCAG	TGACGAGGGT	240
GTCTGTGTG	CTCAGGCAAC	TCCCGCCCTT	CTTCCTTTTG	CTCGAG		286

(2) INFORMATION FOR SEQ ID NO:1393:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 320 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1393:

GAATTCGGCC	TTCATGGCCT	ACTGAGTTCT	CAAATCTAAC	GTTTTAGGAA	TTTTTTATTC	60
CTGCAGAGAG	TTGGGGAGCT	GTTTAAAGT	TGGTTGGTTT	AGCCAGTATA	GCTAGATTCC	120
TCAAGGTCAA	CACAACGCCA	TACTGCTCTA	GCTGGGGCTA	GATTTCTCAT	GATAGTCTAA	180
ACTGTGTGAT	GGCCAAGTCC	CCACTTTGAA	GATGTCCAAA	TTCAGCCTCA	GACATTTCTC	240
CTCAAGAAAG	GGGGGGCAAA	AAAGCCTTTT	GTGCCCTTTT	CCCAAATTAT	TTGCTCATGT	300
CGCAAGACTG	AGGTCTCGAG					320

(2) INFORMATION FOR SEQ ID NO:1394:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 450 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1394:

GAATTCGGCC	TTCATGGCCT	AACGCCATCT	ACGACCTGAT	CGAGCGCATC	GAGGATTTGG	60
CGCTGCAGAA	CCAGATCCGG	GAGCACGTCA	TCTCCATCGA	GGACTCGTTT	GTGAACAGCC	120

AGGAGTGGAC GCTGAGCCGC TCCGTACCGG AGCTTAAAGT GGGCATAGTG GGGAACTGT 180
 CTAGCGGGAA GTCAGCCCTG GTGCACCGCT ATCTGACGGG GACCTATGTC CAGGAGGAGT 240
 CCCCTGAAGG GGGGCGGTTT AAGAAGGAGA TTGTGGTGA TGGCCAGAGT TACCTGCTGC 300
 TGATCCGAGA TGAAGGAGGC CCCCTGAGC TCCAGTTTGC TGCCTGGGTG GATGCACTGG 360
 TGTTTGTGTT CAGCCTGGAG GATGAAATCA GTTCCAGAC GGTGTACAAC TACTTCCTGC 420
 GTCTCTGCAG CTTCCGCAAC ACCCCTCGAG 450

(2) INFORMATION FOR SEQ ID NO:1395:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 276 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1395:

GAATTCGGCC TTCATGGCCT ACCGTCATTC ATTGCAGGGA CCATCAAACC CCAGACAATC 60
 CTATTTTGGT GGGAAATCTA GCAGATAGAG AAGCCAAACA AGTAGCCCTA CAACCTGTAC 120
 AAGGCCAGTT TCTGTGCCTG TCCTCGTTCT CTCCTCTTTA CTCTCCAGAA GAAAGGAGG 180
 ACTACCAAGC CCAAACCTT CAAAACAAG GACCATGGTA TGTCAAGGAA GGGTGCTTCC 240
 TTCTTCTCA CTCTCAAACA ATCTCTATCC TTCGAG 276

(2) INFORMATION FOR SEQ ID NO:1396:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 241 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1396:

GAATTCGGCC TTCATGGCCT AGGGGGCGGG GGGCGGGGCG GGTCTCAGAA ATCAGGAGTA 60
 ACTCTTTGAA AACTAAATAG TTAAATCT CATCCAACTT CCACCTAACT TACATGCCTG 120
 GTTAACCGAC ACTCTGTATA TCCTGTATAA AACATTCTAA CTGATGCCCA CGACATACTA 180
 TTGGCTGATG GTTTGCTAG TATACAGTAT GGCCACTTAC TGCCATTCCC ATGCCCTCGA 240
 G 241

(2) INFORMATION FOR SEQ ID NO:1397:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 314 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1397:

GAATTCGGCC TTCATGGCCT AGAAAATGAA GAAGAAGATC ATCAAGGACC AGAAACTGCT 60
 TGTGATCGTG GGGGGCATGC TGCTGATCGA CCTGTGTATC CTGATCTGCT GGCAGGCTGT 120
 GGACCCCTG CGAAGGACAG TGGAGAAGTA CAGCATGGAG CCGGACCCAG CAGGACGGGA 180
 TATCTCCATC CGCCCTCTCC TGGAGCACTG TGAGAACACC CATATGACCA TCTGGCTTGG 240

CATCGTCTAT GCCTACAAGG GACTTCTCAT GTTGTTCGGT TGTTCCTTAG CTGGGAGAC 300
CCGCAACTCT CGAG 314

(2) INFORMATION FOR SEQ ID NO:1398:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 342 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1398:

GAATTCGGCC TTCATGGCCT AGTGCACACC AAGAACCAAG TTTCAGCTTG GTTACTGTGT 60
TGAAGACACC TTTGCTATAT TTCAAGTCAT TCCTTCTTTT CTCAATTTT TTTAATTGAC 120
AAAAATTTTA TATATCGTGT ACAACATCAA TCCATCTTGG CATCTGTATT TGTGAGGTT 180
GTCTTAGAGG GACAGAACTA ATAGGATATA TATAAGGGGG AGTTTATTAA GTATTAACTT 240
ATATAATCAC AGGGTCCAC AACAGGCTGT CTGCAAGTTG AAGAGCAAGG AGAGCCAGTC 300
AGAGTGCCGA AACTGAAGAA CCTGGAGTCC GATGTTCTCG AG 342

(2) INFORMATION FOR SEQ ID NO:1399:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 614 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1399:

GAATTCGGCC TTCATGGCCT AGGGCCATGT TGGTTAGAAT GGTGCCATAT TTTCTGGGAT 60
AGCACCATGC TGGCTGGGAT GGTGCCATGT TGGCTGGGAT GGCACCTGCC TCAGCCTCCC 120
AAATAGCTGG GATTACAGGC ATCTGCCACC ATGCCTGGCT AATCTTTTGC ATTTT TAGTA 180
GAGAAGGGGT TTCGTCAATGT TGTCAGGCTG GTCTCTCACT CCTGAACTCA GGTGATCCGC 240
CTGCCTCGGC CGCCCAAAGT GCTGGAATTA CAGGCATGAG CCGCCACGCC TGGCCTTTTA 300
CTTGAGTTTT AATAGGATCG CTCTTGCTGC TATTGAGGAT AGTACATATG GGGTAATGAT 360
GCAAGCAGAG ACCTACTGTA GTACTCTTCA GGAGAGAATG GTGGCTTGCA CAAGGATGGA 420
AGCAATGAAG GTGGTGAAAA GTGGTCAGTT TCTATATTTA TTAGGAAACA CCTAGGATGA 480
TATCTTAATA GACCAAAATG TGAAATGTAA GAAAAATAGA GATGTCAAGA TGACACAAAG 540
ATTTTGGCT TTGACAACTG AAAGAATAGT TACTATCAAC TGTGATTGGT AACAAATGCAC 600
ATGGATCTCT CGAG 614

(2) INFORMATION FOR SEQ ID NO:1400:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 244 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1400:

GAATTCGGCC TTCATGGCCT AGTTCTATTT AAAAAATAAA CAACTAGACA ATTAAGTAGT 60

TTATTAACCT ATCACAATTG AATTTTTTTT TAATTTTCAG TCTTAACACA TTTTTTAAAA 120
 TGTATTAAAG TAATACATTG TAGTAGTAGG ATTATATACT CCTTGGCTGA GAATCCAAG 180
 TACTGTGGTT CTACTGTTTA GTGGAAACT CTGGAAGTTA AAATATAGAA TATGAAACCT 240
 CGAG 244

(2) INFORMATION FOR SEQ ID NO:1401:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 325 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1401:

GAATTCGGCC TTCATGGCCT AAAACAAACA AAAAATTATC TGAATGATCC TGTCTCTAAA 60
 AAGAAGCCAC AGAAATGTTT AAAAATTCA TCGACTTAGC CTGAGTCATA ACGGTTAAGA 120
 AAGCACTTAA ACAGAAGCAG AGGCTAATTC AGTGTACAT GAGGAAGTAG CTGTCAGATG 180
 TCACATAATT ACTTTCGTAA TAGCTCAGAT TAGAATGGCT ACCCCATTCT CTAGACAAAA 240
 TCAAATTGTC CTATTGTGAC TCTTCTAAAA ATGAAGATGA AGAGCTATTT AATGACACAC 300
 CTTGGATTAA AACGGGAAAC TCGAG 325

(2) INFORMATION FOR SEQ ID NO:1402:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 364 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1402:

GAATTCGGCC TTCATGGCCT AAAAGAAAAG AGAAAGTGTT ATTTTCCTGT TAGTGACATG 60
 TAGTCCCTTT GTTCTAGTAG GAAAAAAGGT GCCTAGAGGT AGTATATAGA GTAAATATTG 120
 TTCCTTTAGC CTACTTCCTG CAGCTTCCAA TTTATCCAAG GAAATGTCTA CAACAATTTT 180
 GTTCAAAAGT CTGTTCTAGT CAATAGCAGG AGAAGTCCAC GTTATTGGGC TGATTTTGCT 240
 TACATCAGCA AGAGAAATGT CACGTGATAC TCAGGCCGCG CTTTCTCTTC CATCACACCA 300
 TCTTCAAGGA ATGTCAATAA ACCCACTTTG GCTAGGCAGG ATTGAATTCT AGACCTGCCT 360
 CGAG 364

(2) INFORMATION FOR SEQ ID NO:1403:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 262 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1403:

GAATTCGGCC TTCATGGCCT AGTTAGGGAC TAACATTTGT ATCAACAGTT GATAAATGTC 60
 TAAGATTGTT TATTATACAG CAGGGTACAA TGGTAGTGCT AATGCCAACA GGGCACCATG 120
 GAAGTTAGTC TAAAAATTAT CGCTAGGCTT TATACAAGCA ACAACATATG CTGCTGCTCT 180

TAGAATTTTG GGAAATGATC TGCTTCTAAT ACTAAGCAGT TCTTTAACAT TTTTAAATAT 240
TGAATTCTAG ACCTGCCTCG AG 262

(2) INFORMATION FOR SEQ ID NO:1404:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 396 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1404:

GAATTCGGCC TTCATGGCCT AGCAATTTGC TTCAGTTTCC TTATGTTTGC CTTTCTCATC 60
TGTCTCTTT TCCATTTTAT TCCTACTCTG TCTCAGTCCA CTTACAGTTA TATTTCTCTAT 120
CTGTGTATTT TATAATATTT GTGCTTTAAT ACTTTTAAAA TATCCTTTAT TTTACTGTTT 180
CTTCTCTTCC CTGTGCATAT TTAAAGTGT TTTATTCTC AGCCTTCTAT ATCTTTGCAT 240
TAATTCTGTT CCTCTACAAT AGAGTCCGTT CCAAGCTTTC TGTCTTCTCG TGTCCTTCCA 300
CGGCTCTGGC TCTCTCTGCA TTATTCTCTA TTTATGGAAT ACAAATCTTT TACCCTTGTA 360
TTTTTCTCAC TCCTCTCCAC ACACCCCCGA CTCGAG 396

(2) INFORMATION FOR SEQ ID NO:1405:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 444 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1405:

GAATTCGGCC TTCATGGCCT AGACCAAAAT GTCTGCCCCAG ATAAAGGATA CATTGTGCAT 60
ACATACACTG GGGAGAGGCA GACAAAAAAA CAATGTAGTT TGAGTGTGTG TGGGTGCTTG 120
CATGCGTGCA TGCAGGCATG TGCATATATA ATGCTAAAC ATGATAAGTA CTATTAAAAA 180
AACAGGTTAG GGTGATTGAA ACTACTAGGG TATGAATAAG AGTGGGTTGC AATTTAAAGT 240
AGGGTCATTG TGGTTGGCCT TATTGAGGTG ACATTGGAGT CAAGACTTGG AAGAAGAAAG 300
GTTGTTGGCC ACACAGCTAT TGAGGGAAAA ATGTTCCAGA TAGAAGAAAC AGTCAGGGCA 360
ATGCCTTGGG ATGGAATCAT GCATAGAGTA TTCACAGAAT AGCAAGGAAG CTCTAGTTCT 420
AAAGTAAAGT GACTGAGACT CGAG 444

(2) INFORMATION FOR SEQ ID NO:1406:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 363 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1406:

GAATTCGGCC TTCATGGCCT ACCTAGAAGG TAGTAATGAT AAGCATTTAA TTAGAAGTAG 60
GCCTGAAGTT TGCAGTGCAA TGCAGTAAGT ATTTACCGAG TGATTCTAT GAGTAAGGAT 120
GTGATAGCTG CTATAAGAGC TGCAAAGTTT ATTAAGATAC ATCCCTGTCC TGGAAACACT 180

GCCAGCTTCG ATGAGAATAC AACAAATGTTA GATATATTCG TTTTGAAGA TACCTTTCCC 240
 CCAGTTATTT TCATTTTACA GCTTCTCCAG CCTCCTTCAG CTTCTGTTCT CCTCTTTTGC 300
 TTTTCTGTCT CAATTTTCCT GCCCAGCCCT AAATTCACAG AGTAAATCCA CCAGAACCTC 360
 GAG 363

(2) INFORMATION FOR SEQ ID NO:1407:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 229 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1407:

GAATTCGGCC TTCATGGCCT AGGCTTCAGG GATAACCACG TTCAGGTGGG TTAGACACAC 60
 CTCCTGTGGG AGGGTGATTG CAATTAGCTA TCATAAGGCA GGAGACACAA CAGCAACTTA 120
 AATTATCCAC AAGCAGAATC ATGAGCTGTT TGCAAAGGGA GTTTCCATCG CAAGACAGTT 180
 TCACTGTATT TAAGCGAGAT CCTGCCCTCG TACACGATCA CCGCTCGAG 229

(2) INFORMATION FOR SEQ ID NO:1408:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 512 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1408:

GAATTCGGCC TTCATGGCCT AGGCTTCTAG AACAGAATG TAGGCAGGCT CCCAAATGGA 60
 GAGGTAAACA TGACCGCGTT GTTGAAACT ACTTCATTAA TTTGTAAATC AGAACCAAAA 120
 AGCTCTGGCC CTCCCACTTC TCITAGCTGA CCCTCCTCCC CACTTACGGA TAAACAGACT 180
 TTAACCTCCC TAACCCAGAA ACACTTCCAC CAAAAATGTA TGGTTATACC TTATCCTAAA 240
 AAGGCACCAT GCAGGCATTT AAGACTGAAC CAGTGAATC TAAATATGTA GTAGTAGAAA 300
 ATATCACTAA TCAAACTTC CAGCATCAGA TGGTACAAAA CCCCAAGAGG ACTGGTGACA 360
 TGTACCCCGG GATGGCAACC CCAGCTTCTG GCAACCCAC AGCCAGCGG GAGCTTCAGC 420
 TCTGGTCAGG TGCACGGCTG CCAAAGTCTG CACACCTTG GGACAAGGAA AGGAGACACT 480
 TGCTTCATTG TGCTATTCAT GACCCAGTCG AG 512

(2) INFORMATION FOR SEQ ID NO:1409:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 262 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1409:

GAATTCGGCC TTCATGGCCT AATGGATTAT ATTTCTATAA CAGTTAGAGT ACTATTCCAT 60
 TTATCTCTTT CATTTTGAGT AAAGTTTGGT AGTTTAGGGA GGAATTGATC AATTTCATCT 120
 AAATTGAAAG ATTCAGGTAC ATAAAGTTGT TGTTATATTA CTTATTATTC TTTTAATGTC 180

TGTGGGGTCT AGTGATGTCT CCTCTTTCAG TTCTGATATT GGTAATTGT GTCTTCTCTC 240
TTTTTGTGCC AGCATGCTCG AG 262

(2) INFORMATION FOR SEQ ID NO:1410:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 441 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1410:

GAATTCGGCC TTCATGGCCT AGGGAGGTGG TTTCTCTATC ATTGCATGAG GTAAGAGTCT 60
GGCCCTGGAT GCTAAGGCTG CAGTTTTCTA CAGAAAGGAG TCATCTCTGT GAGGCAGCAT 120
CAGCCTCCAA GACACAGTGT GCTGACCTGG TTTTGTATAA AGATGAAAAC AGCTGTTCTC 180
AACTGGCTGA GGCCGGCCAC AGAGAGAGCG GCGGGCTCAG CCTTCACAGG ATTGTCCTTC 240
CACTAAAGGG TAGGGGGTTT TAATCATCGC AGAAAGGAAG TGGGGGTGAA GGTGAGGAAA 300
AATAGAAGCA CGAATTCACC CCTCAGGCCT CAGCTAGAGG AAGCTAAGAG AAGAAATGAG 360
ATTGCATAAC TGTTAAGAAA AAGGCAAAGC TGGAGAGAAT GCAGAGGATT CTGTTTCCTG 420
GAGAGAACCT TCAGACTCGA G 441

(2) INFORMATION FOR SEQ ID NO:1411:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 479 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1411:

GAATTCGGCC TTCATGGCCT AATTCATTGT CTGGTCCTTT ACAAAGACA TATGCTGGCT 60
CCTGCTCTCT GTGGATGATA GGTCTACAAA GATGTGATTC AACTCATATA TGTCTCCAAA 120
TTTATATATT AATTCATATA CTGTTTGTGC TTACATTAAT CTAGCATGTG CTTTTGGCTT 180
GCTACTGCAG TAAGTTACCT TCTAATTCAT CATTAGGTCA ACTTTATCAA CTCACCTAAG 240
TCCAAAAGTA AATGTAGGTT TCTCCTGGGT TCTTTTGCCT CTTAAGTTT GCCATCCCCA 300
AATAAGCACA ACAGAGACCT GCACCAAGAG ACCTTACTTT TAGACTGTAA GCACCAAAGT 360
GATTTCTGTA GAGAGAGTGA GCCAGGCTCA GTCTTATGAC TGGCAATACA AGTTGAGGGT 420
AGGAGCTTTG GACAGAACAC TAGCTATGTA TAGTGTGTGC TAGGTGAGTG CTTCTCGAG 479

(2) INFORMATION FOR SEQ ID NO:1412:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 497 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1412:

GAATTCGGCC TTCATGGCCT AGCCGATTTA TAAATATGTA TATATAACCT TTCCCTTTT 60
GAGAGATCTC TTAGTAATAG TCAAAGCCAT ACCCTATTCC TTAGTGAGAA AGCCAGTTTG 120

AAACGAATGT AGCAATAGAT GTAAAAACAT TTAAAGGCGT TTAATGTGG CTTTTTAATG	180
AGCTGGCTTA TGCCTGTAGT CCCAGCACAT TGGGCAGCTG AGCTGGGAGG ATCGCTTGAG	240
CCCGGGAGTT CAAGACTAGC CAGGGCAACA TAGTGAGACC CCATCTCTAT TTAAAAAATA	300
ATGTTTTTAA AGATAAGGAA CAGACTTAAA GTGATGATTG ATTGCTCATA GAACGTTTAT	360
TTTGGGCTCC AGAACTAGGA ATGATGTAGA ATTTATTGTT GTGTCATTGT CTCATTAAAT	420
GCTGTAGTTT CCTATGTCCT TGCCTACCTT CTTTCCTCAG AGCCTCGCAT CTGACCCCTCA	480
GAGAGTAGCA GCTCGAG	497

(2) INFORMATION FOR SEQ ID NO:1413:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 439 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1413:

GAATTCGGCC TTCATGGCCT ACAGGAACAA AAAATGCTAT GCTATTATCT CAAAAATGCA	60
TACTCCTTCC TACTTAAGAA TAATAAATTT ATATATTATG ATATGGTAAA ATTCACAAC	120
AATTGTATTT TTCCCTAGAA TGTTTAAAGC ATTATCTAAT ACCAGCTTCA GTGTCTATAT	180
TACTGTAAC TCAATGAAAGA CTACTAACAA TACTGGCTAT CATTTATTAA TATTAAGTAG	240
TACTTGCCAG ATGCCGTTAG AGGTGCTTTA AATGCATTCT CATTTAGTCT TCGTGTGTAC	300
TACCGTTATC TTCACCTTTT AGATAAGGAG ACTAAAGTAT AACTAGAGCT AAGAAACATG	360
AGAAAGACGA CCTAGCTACT GCCTATTTTG TAATTCCTCAT GGAATAAGCT TGGAGAAGTA	420
AGAACTATTA CTACTCGAG	439

(2) INFORMATION FOR SEQ ID NO:1414:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 243 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1414:

GAATTCGGCC TTCATGGCCT AGCCACTTCA AGACGGCAAG TTATTTTAGC TCCTGTCTAA	60
ATAAGTTAGT GGGCTCCAGT CCTTAAACCA CTATTTCTT TATTAATTCC TCAAGTACAG	120
ACTTTTGTAT GTAACCAATC TTTTAAACC TGTGTATAAT GACTCATTAA TGAGTTGTAA	180
AATAAATGTA GTGAGTTATG ACCAATATAA AAAAATAGAA AAGGCCAGGC ACAGTCGCTC	240
GAG	243

(2) INFORMATION FOR SEQ ID NO:1415:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 276 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1415:

GAATTCGGCC	TTCATGGCCT	AGTCTTCCAA	GACAGGAATC	AGCAACCTTT	TTTGTTTTT	60
CTGTATCAGT	AATTCATTCT	GTATATTTTA	AAAAGTTTTA	ACCTCTTCTT	CCTAGCCCTC	120
CAGTATTTGT	TTATAAATTA	AAACGTTTCC	CAAAGTGTTT	TCTGTGAAAC	AATAGTTCTA	180
AAAGGTGCTC	TAAGAAAAGC	TAAGTACATG	GCAAAATCCA	AAGTATATGT	TTTATTCATT	240
ACATTTGATG	AATTTTTTTT	GTTTTTTCCT	CTCGAG			276

(2) INFORMATION FOR SEQ ID NO:1416:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 341 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1416:

GAATTCGGCC	TTCATGGCCT	AGAGAGCAGG	TTTGTAGCTTG	CATCCAGCTG	TTTCTTGAGT	60
GATGTGTACA	GCTTACCCCC	AAAGAGGCAA	CTGAATTTCA	GCTGCTCTAA	TACCCACACC	120
CTCAACTTAG	GTTTAGTCAT	AATAAAAAAC	AGAATGGATT	TGTTAGTTCC	ATTGATTGCC	180
ACAAACCTCA	CCTTCTGTGT	GGCAGAGATG	TGCTTTAGTT	CTTCATTGGA	ATGTTACTTT	240
CAGATCTCAC	AAACCTCAAA	CCTAGGGCAC	CACCAATGAC	AAAGAGAATG	CTAAATAGAT	300
AAATCCTTTG	CCAGGTCTTC	AAGCTTTCCA	CTCCCCTCGA	G		341

(2) INFORMATION FOR SEQ ID NO:1417:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 455 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1417:

GAATTCGGCC	AAAGAGGCCT	AGCCATTATT	ATTAAAAAGT	AGGATTGCTA	CCCGCCATTA	60
CTATTAAAAA	GTAGGATTGC	TACCCGCCAT	TATTATTAAA	AAGTAGGATT	GGTACCCGCC	120
ATTATTATTA	AAAAGTAGGA	TTGCTACCCA	ACATTATTAT	TAAAAAGTAG	GATTGCTACC	180
CTCCATTATT	ATTAAAAAGT	AGGATTGCTA	CCCTCCATTA	TTATTAAAAA	GTAGGATTGC	240
TACCTGCCAT	TATTATTAAA	AAGTAGGATT	GCTACCTGCC	ATTATTATTA	AAAAGTAGGA	300
TTGCTACCTG	CCATTATTAT	TAAAAAGTAG	GATTGCTACC	CGCCATTATT	ATTAAAAAGT	360
AGCATTGCTA	CCCGCCATTA	TTATTAAAAA	GTAGGACTGC	TACCCGCCGT	TATTTGCACA	420
GCTACCTTAT	GAAAGTAGTT	TCACGCTGTC	TCGAG			455

(2) INFORMATION FOR SEQ ID NO:1418:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 573 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1418:

GAATACCTAG	CTTCCATGAT	TTATGATAGA	TATCCTTTAT	TGGACCAATT	CGTGTCTGTA	60
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ACCAGCCTCC	TGTTTCTACT	GCCATCCCCT	CCTCATGCAC	AGATGCCTCC	TCCCTTGGCT	120
CCTGCTCTGA	TCCCTGTACC	CAGCTTGTC	CCTGCAAGCA	TGTTCCCCTC	CCTTGCCCAG	180
GCTCTGACAC	CCCACACATG	TGTGGATCCC	CTCCCCTGTC	CCAGCTCTGA	TACCCCTTGC	240
ATGTGTGGCT	GCCCCCTACC	TGGGTGTCCT	CTTCCCTGTC	CCAGCTCTGA	CACCCACGCA	300
TGTGGGGCTG	CCCCGTGCCT	AGGTGTCCCC	TCCTCTGCTC	AGGCTCTGTC	CTCCTGCCGT	360
TGGCTTTCCC	ATTCTGGATG	CACCTCACAC	ACAGCCTTGT	CATCTTTGGA	TGAATTTGGC	420
CTCCCCCATC	CACTGCTGGT	GCAGATGCTT	CCTTACGGGG	CCTTGCTCTGA	TGGCTTTAGG	480
GCTGAATCAT	GCAGGAAGGA	AGGAGAAGGA	CAAGAAGAAA	AGGGAAGGCT	GGGAAGGGAA	540
GCGGGTGTA	AAATTGGTTC	ACAAGCCCTC	GAG			573

(2) INFORMATION FOR SEQ ID NO:1419:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 188 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1419:

GAATTCGGCC	AAAGAGGCCT	ATTTTAAAAA	AAACTATTTA	ATTTTTTAAT	TTATTTTGG	60
TTGTTTTTTG	CACAAATGAAG	TTTCAGCTTC	TCAACCTTCT	CCCCTACCCA	GGGCTGTGGA	120
CCCAGACTGG	CCTTGAGCCA	CAGTCCCTCT	TTCCCTCCTC	ACCCTCTTCC	CCCTCCGGGC	180
ACCTCGAG						188

(2) INFORMATION FOR SEQ ID NO:1420:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 572 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1420:

GAATTCGGCC	AAAGAGGCCT	ACGAGGAAAG	ATCTAATTAT	CATGGACCTG	CGACAGTTTC	60
TTATGTGCCT	GTCCCTGTGC	ACAGCCTTTG	CCTTGAGCAA	ACCCACAGAA	AAGAAGGACC	120
GTGTACATCA	TGAGCCTCAG	CTCAGTGACA	AGGTTCAACA	TGATGCTCAG	AGTTTGTATT	180
ATGACCATGA	TGCCTTCTTG	GGTGCTGAAG	AAGCAAAGAC	CTTTGATCAG	CTGACACCAG	240
AAGAGAGCAA	GGAAAGGCTT	GGAAAGATTG	TAAGTAAAAT	AGATGGCGAC	AAGGACGGGT	300
TTGTCACTGT	GGATGAGCTC	AAAGACTGGA	TTAAATTTGC	ACAAAAGCGC	TGGATTTTACG	360
AGGATGTAGA	GCGACAGTGG	AAGGGGCATG	ACCTCAATGA	GGACGGCCTC	GTTTCCTGGG	420
AGGAGTATAA	AAATGCCACC	TACGGCTACG	TTTGTAGATGA	TCCAGATCCT	GATGATGGAT	480
TTAACTATAA	ACAGATGATG	GTTAGAGATG	AGCGGAGGTT	TAAAATGGCA	GACAAGGATG	540
GAGACCTCAT	TGCCACCAAG	GAGGGTCTCG	AG			572

(2) INFORMATION FOR SEQ ID NO:1421:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 498 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1421:

GCAAGACGGC	TACTGAGGCA	GGAGAATCGC	TTGAACCCAG	GAAGCGGAGG	TTGCAATGTG	60
CCAAGATCGT	GCCACTGCAC	ACTCTAGCCT	GGGCAACAGA	GCAAGACTGT	GTCTCAAAAA	120
AAAAAAATCT	TNGACNAAAC	ATAGTTGTTN	ACATACTTCT	TTAATCCCAG	AGTTAGTTTT	180
AAAAANNACA	TGATTGCTGT	TTTTGCATAT	TATCTCAGCG	GTCTAAAATT	AACCTAGCCA	240
TGTGCAGGAA	TGGGTAAAGT	CCCCTTAAAC	AAAAATGGGG	TTAGTTANGT	TAGTTCTTTT	300
GCCATTTTAC	TGGTCATATA	CCTGAAGCGC	TTAGCCTGAC	ACAATTGAAC	GCCAGACGGA	360
AGCCGNGATC	AGCGGTCCTG	ACGGGGGTCA	GAGTCAGACC	AGGGGTCTTT	TACCCAAGTG	420
GGGAAGATTG	GGAAAGGCCT	AGGATCAGAG	AGGGAAATGG	GTCCCTGGTT	GCCCATGGAC	480
CTAATGGGGT	CTCTCGAG					498

(2) INFORMATION FOR SEQ ID NO:1422:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 827 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1422:

GAATTGCGCG	CCGCGTCGAC	GAGGAAACCA	GCCAAGGACT	AACTACGACC	ATGAGATTGG	60
CAGTGATTTG	CTTTTGCCCTG	TTTGGCATTG	CCTCCTCCCT	CCCGGTGAAA	GTGACTGATT	120
CTGGCAGCTC	AGAGGAGAAG	CTTTACAGCC	TGCACCCAGA	TCCTATAGCC	ACATGGCTGG	180
TGCCTGACCC	ATCTCAGAAG	CAGAATCTCC	TTGCGCCACA	GAATGCTGTG	TCCTCTGAAG	240
AAAAGGATGA	CTTTAAGCAA	GAAACTCTTC	CAAGCAATTC	CAATGAAAGC	CATGACCACA	300
TGGACGACGA	TGATGACGAT	GATGATGACG	ATGGAGACCA	TGCAGAGAGC	GAGGATTCTG	360
TGGACTCGGA	TGAATCTGAC	GAATCTCACC	ATTCCGATGA	GTCTGATGAG	ACCGTCACTG	420
CTAGTACACA	AGCAGACACT	TTCACTCCAA	TCGTCCCTAC	AGTCGATGTC	CCCAACGGCC	480
GAGGTGATAG	CTTGGCTTAT	GGACTGAGGT	CAAAGTCTAG	GAGTTTCCAG	GTTTCTGATG	540
AACAGTATCC	TGATGCCACA	GATGAGGACC	TCACCTCTCA	CATGAAGAGC	GGTGAGTCTA	600
AGGAGTCCCT	CGATGTCATC	CCTGTTGCCC	AGCTTCTGAG	CATGCCCTCT	GATCAGGACA	660
ACAACGGAAA	GGGCAGCCAT	GAGTCAAGTC	AGCTGGATGA	ACCAAGTCTG	GAAACACACA	720
GACTTGAGCA	TTCCAAAGAG	AGCCAGGAGA	GTGCCGATCA	GTCCGATGTG	ATCGATAGTC	780
AAGCAAGTTC	CAAAGCCAGC	CTGGAACATC	AGAGCCACGG	CCTCGAG		827

(2) INFORMATION FOR SEQ ID NO:1423:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 348 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1423:

GAATTGCGCG	CCGCGTCGAC	GGGAGAGGAA	GGGTTGGGCA	GGATGGAATA	TTAAATTGTA	60
ACATGATAAA	CATGCAAGAC	TGTTATCCAA	TCTAGATAAT	TTATATACAT	TTTGATGACT	120
TAGGAAAACA	AAGCAATCAT	TTGTGACAAG	CCTAAAAAGC	TTGACATATT	TAACATACTT	180
AGGAACTTTT	TTTGTCGGT	GGGAATTCTC	TAATTGTATC	ATGTGGGCCT	TTTGAAAGTA	240
ACAAACAGAA	GGCCAGTCTG	TTGCAAGTTT	GCTGCTGAAC	ATCACATTCC	ACCCTAAGAA	300
AACACAAGGT	GGATTGCATC	GAGGGTGGAT	ACCTTACCTT	AGCACAGA		348

(2) INFORMATION FOR SEQ ID NO:1424:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 152 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1424:

GAATTCGCGG CCGCGTCGAC TTGGAGAATG TGGCCTCTGA TCACTAACCA GGGTTTTCTC	60
TTTACTGCTG CTTGTTTACT TATTCTTCA CCAAAGCCAG GGAACGTCCC TTTAGCTACT	120
GCAGCATTTT TAACAGATGC GACAAATCAC AG	152

(2) INFORMATION FOR SEQ ID NO:1425:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 206 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1425:

GAATTCGCGG CCGCGTCGAC CTAAACCGTC GATTGAATTA GACCTGCCTC GAGATGCGCC	60
ACTTTCTGCT CACCCACCTT AGAGCCTTTG CATATGCAGT TGCTTCCTCA GAGTATTGCC	120
ATCCCCAGCA CGACCCCCAG CTCATTCTTC AGGCCACTAA CGTAAATGTT ACTTTCTCAA	180
AAACACCCTC TCCATCCCGG CACCCA	206

(2) INFORMATION FOR SEQ ID NO:1426:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 353 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1426:

GAATTCGCGG CCGCGTCGAC GTGGGTACTT CATCCTCCTC ATCACTGGTT GGCCTGAGA	60
GCTTCTTAAG ACGCTCCATG AGCTCTTCTT CTTCTCCATC ATCATCCACA TCCTTCTTCC	120
GCCTGCCTTT TCGGGTATCT CGCTTTTTTT TTGCTGCTG TTGCTGTTGC TGCTGCTGCT	180
GCTCCTTCTC CTTGAGCACT TTCTCTTCTT CCCCAGCCTG TTTATCTTCT ACTGCCAGCT	240
CTTCAAAGAA CGTTTTTTTG ATCTTCTNGT CTTCTTCCC TTTCTTCACC ACTTGTCTG	300
ATGGGCTCGT GCTCTCTCCG TCCCCGATCC ACTCGGGCTC CGGCGGACTC GAG	353

(2) INFORMATION FOR SEQ ID NO:1427:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 343 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1427:

GAATTCGCGG	CCGCGTCGAC	AGATATTTGG	TTATCTTGAC	TTTTTAAAT	AACATATTC	60
TACAGGATTT	TGAGTCTGAG	AAGAGAAAGG	TAATATGCAA	GACACTTCGA	TTTGTTGCAC	120
ATTATTATGG	AGCATCATTA	ATGGTTTGTA	CATTTCCTGT	CCTTTGGGCT	TGAATGGACA	180
GTACCAAATT	TGGGGAAATC	AGCAACTTGA	TGCACAGCTA	CGAGGAATAA	ATGCTTTTGC	240
TAATGCACAT	GGTCCCGTTG	CTTCCCACT	GCTGAAGACC	TCTCCTTACA	GAGTGTTTGA	300
TAATGCATCT	GTTGAACATG	CACTGCTAGA	TGGTCTCTC	GAG		343

(2) INFORMATION FOR SEQ ID NO:1428:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 542 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1428:

GAATTCGCGG	CCGCGTCGAC	GAGGGGAAGA	TGTCACGCAA	GATAGAAGGC	TTTTTGTTAT	60
TACTTCTCTT	TGGCTATGAA	GCCACATTGG	GATTATCGTC	TACCGAGGAT	GAAGGCGAGG	120
ACCCCTGGTA	CCAAAAAGCA	TGCAAGTGCG	ATTGCCAAGG	AGGACCCAAT	GCTCTGTGGT	180
CTGCAGGTGC	CACCTCCTTG	GACTGTATAC	CAGAATGCCC	ATATCACAAG	CCTCTGGGTT	240
TCGAGTCAGG	GGAGGTCACA	CCGGACCAGA	TCACCTGCTC	TAACCCGGAG	CAGTATGTGG	300
GCTGGTATTC	TTCGTGGACT	GCAAACAAGG	CCCGGCTCAA	CAGTCAAGGC	TTTGGGTGTG	360
CCTGGCTCTC	CAAGTTCCAG	GACAGTAGCC	AGTGGTTACA	GATAGATCTG	AAGGAGATCA	420
AAGTGATTTT	AGGGATCCTC	ACCCAGGGGC	GCTGTGACAT	CGATGAGTGG	ATGACCAAGT	480
ACAGCGTGCA	GTACAGGACC	GATGAGCGCC	TGAAGTGGAT	TTACTACAAG	GACACTCTCG	540
AG						542

(2) INFORMATION FOR SEQ ID NO:1429:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 465 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1429:

GAATTCGCGG	CCGCGTCGAC	TTAAGAGTCT	GCTTCGGAGA	CCGTAAGGAT	ATTGATGACC	60
ATGAGATCCC	TGCTCAGAAC	CCCCTTCCTG	TGTGGCCTGC	TCTGGGCCTT	TTGTGCCCCA	120
GGCGCCAGGG	CTGAGGAGCC	TGCAGCCAGC	TCTCCCAAC	CCGCAGCAT	GGGCCTGGAT	180
AAGAACACAG	TGCACGACCA	AGAGCATATC	ATGGAGCATC	TAGAAGGTGT	CATCAACAAA	240
CCAGAGGCGG	AGATGTCGCC	ACAAGAATTG	CAGCTCCATT	ACTTCAAAAT	GCATGATTAT	300
GATGGCAATA	ATTTGCTTGA	TGGCTTAGAA	CTCTCCACAG	CCATCACTCA	TGTCCATAAG	360
GAGGAAGGGA	GTGAACAGGC	ACCACTAATG	AGTGAAGATG	AACTGATTAA	CATAATAGAT	420
GGTGTTTTGA	GAGATGATGA	CAAGAACAAT	GATGGCATAC	TCGAG		465

(2) INFORMATION FOR SEQ ID NO:1430:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 373 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double

(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1430:

GAATTCGCGG	CCGCGTCGAC	GCTGTTCATG	AGGAGACTTA	ACCACAATTC	AAAGTGTAGC	60
AGTTGTGTAT	TTTAGCATT	TAATATTTGA	TTGAGGCCCT	GAGGTGTTAA	TATCTCAATC	120
TCAGAGTTAG	ATGTTTCATG	CCTTTTGA	TTTTTTAAAC	ATTTTTCATA	ATTTTTTTTT	180
TAAGTTAGGG	AGCACATTGA	GTGAAGTTCT	CTGTGTAGAA	CAATACCTTC	TGCTCTGCTT	240
CTCCCAGCTT	TACTGAGGG	CTGGAAAAGG	ACAGGCCTGT	CCAGCTGTAC	TGTCCCCTG	300
TGTATGGGGA	AGCTCAGGCT	CTGGTGAAG	CAGGGGGCAT	GGATGTCAA	CAACTGATGT	360
GCAAACTC	GAG					373

(2) INFORMATION FOR SEQ ID NO:1431:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 632 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1431:

GAATTCGGCC	TTCATGGCCT	ACTACTGATG	AGAACATTAT	CTGCATATGC	CAAAAAATTT	60
TAAGCAAATG	AAAGCTACCA	ATTTAAAGTT	ACGGAATCTA	CCATTTTAAA	GTTAATTGCT	120
TGTCAAGCTA	TAACCACAAA	AATAATGAAT	TGATGAGAAA	TACAATGAAG	AGGCAATGTC	180
CATCTCAAAA	TACTGCTTTT	ACAAAAGCAG	AATAAAAGCG	AAAAGAAATG	AAAATGTTAC	240
ACTACATTAA	TCCTGGAATA	AAAGAAGCCG	AAATAAATGA	GAGATGAGTT	GGGATCAAGT	300
GGATTGAGGA	GGCTGTGCTG	TGTGCCAATG	TTTCGTTTGC	CTCAGACAGG	TATCTCTTCG	360
TTATCAGAAG	AGTTGCTTCA	TTTCATCTGG	GAGCAGAAAA	CAGCAGGCAG	CTGTTAACAG	420
ATAAGTTTAA	CTTGCACTCG	CAGTATTGCA	TGTTAGGGAT	AAGTGCTTAT	TTTTAAGAGC	480
TGTGGAGTTC	TTAAATATCA	ACCATGGCAC	TTTCTCCTGA	CCCCTTCCCT	AGGGGATTTT	540
AGGATTGAGA	AATTTTTCCT	TCGAGCCTTT	TTAAAATTGT	AGGACTTGTT	CCTGTGGGCT	600
TCAGTGATGG	GATAGTACAC	TTTTCACTCG	AG			632

(2) INFORMATION FOR SEQ ID NO:1432:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 298 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1432:

GAATTCGGCC	TTCATGGCCT	ACTAATTTCC	AAGAGCTAAA	CTTTATACCG	CCTGCAATAT	60
TTCCATTTAC	TACCAGTTTT	TTTCTGACCT	AGTCAGATAT	AAGAAGCCCC	CTTACTGGAT	120
ACAAGACAGT	TAATTATCAG	ATCCAGTCTG	ATCCTAGATC	CAGTCTGATC	CTAGACCCAG	180
TCCAGTTTCT	GTTGTGACTT	CCAAACCCAG	TTTGATCAG	AAATTTGCTC	AAAGAACTA	240
GGAGAGCTCA	AAACACAAAT	ATGTGGAGCT	TCTGAATCTG	AGAGAGAACG	AACTCGAG	298

(2) INFORMATION FOR SEQ ID NO:1433:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 335 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1433:

GGTGGTTTC	ACCTTGTTGG	CCAGGCTAGT	CTTGAAGTCC	TGACCTCAGG	TGATCCACCC	60
ACCTCGGCCT	TCCAAAGTGC	TGGGATTACA	GGCATGAGCC	ACCGCATCTG	ACTGGTGAC	120
TTTACTTTGA	CCTGTCATAA	ATCCCTTGGT	TTGTTATTAC	TAGTTTTTAC	TTTAGACAGC	180
AATTATCTTT	CAAGGAAAAA	TTTAAAAGGA	AAAAATGTCT	TATATTTACC	CTCATGTTTA	240
CCATTCCCAG	TGCTCTTTAT	TTCTTTATGT	CAATCCGGAT	TTCAATTTGT	TATCATACTG	300
TTTCTGCCTG	AATAACAGTT	TAACAGCAAC	TCGAG			335

(2) INFORMATION FOR SEQ ID NO:1434:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 316 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1434:

GAATTCGGCC	TTCATGGCCT	AATGCTCTGT	GTCAGTGTCT	CCCGGTGCTC	AGCACAGACA	60
AGTTCAAGAC	AGATTTTTAT	GATCAATGCA	ACGACGTGGG	GTCATGGCC	TACCTCGCA	120
CCATCACCAA	AACGTGCAAC	ACCATGAACC	AGTTTGTAAG	CAAGTTCAAT	GTCCTCTACG	180
ACCGACAAGG	CATCGGCAGG	AGAATGCGCG	GGCTCTTTT	CTGATGAGGG	TACTTGAAGG	240
GCTGATGGAC	AGGGGTCAGG	CAACTATCCC	AAAGGGGAGG	GCACTACACT	TCCTTGAGAG	300
AAACCACTGT	CTCGAG					316

(2) INFORMATION FOR SEQ ID NO:1435:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 383 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1435:

GAATTCTAGA	CCTCCCACCC	TGTAGAACAT	TCTCCTCACT	TAGGAGATAG	TCATATTTTC	60
AGGCTGCCTT	TGAAACTGTG	GGTACACAAA	CAGCAGAGCG	ATCTATTTCA	GCAGTTGAAG	120
TTGTATTTGA	GCCATTATTT	CTTCCACTCT	CTTTTGGTT	GAGTTTCTAG	GAAGGAAAGG	180
GCTGAAGTCC	ATGACTGCTC	ATATTACAGT	GCTAAGTCTT	CACAGCCATC	CACTGTTTAT	240
ACACAAGAAG	AAACTAGGCC	CACCAAGAGT	AAGCGCCTGC	CTGAGGTCCG	TGAGTGAGTA	300
AGGGCCAAAG	GTGAGGTTGG	GATCTGGCCC	TTTCTCTTTT	CTGGCCACCA	CAGGGCACTA	360
CCTCCCATAC	CCACACACTC	GAG				383

(2) INFORMATION FOR SEQ ID NO:1436:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 303 base pairs

- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1436:

GGAGAACTGC TAAGGTCCAC AACGTCGACA ATTGAAAGCT TTGCTGCACA AGAAAAACAA	60
ATGGAAGTTT GTGAAGTATG TGGAGCCTTT TTAATAGTAG GAGATGCCCA GTCCCGGGTA	120
GATGACCATT TGATGGGAAA ACAACACATG GGCTATGCCA AAATTAAAGC TACTGTAGAA	180
GAATTAAAG AAAAGTTAAG GAAAAGAACC GAAGAACCTG ATCGTGATGA GCGTCTAAAA	240
AAGGAGAAGC AAGAAAGAGA AGAAAGAGAA AAAGAACGGG AGAGAGAAAG GAAAGAAGCT	300
GAG	303

(2) INFORMATION FOR SEQ ID NO:1437:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 228 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1437:

GAATTCGGCC TTCATGGCCT AGACTTTTAC ACATTTTAT TAGCTACCTG GAATTATTTT	60
TGTAACACGT TAAGTGTAAG TAAACAAATA ATGCTTTGCT TTTTGTTC TGGAATTATT	120
GTTGTATTC TTTGCCAAT GCATATATCT TCAGGTCTTT TTTTATAAC CATATGCATA	180
CCAAGGCACC ATTCCATTGA CTTTCCAAC TCTGTCCCA CCCTCGAG	228

(2) INFORMATION FOR SEQ ID NO:1438:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 498 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1438:

GTGAATTCCA GTCCCCACCC AGAAACCCGC AGCATGATTG TCTGCCTCCT TTTTCATGATG	60
ATTTTATTGG CAAAGGAAGT TCAACTGGTA GACCAAACAG ATTCACCTTT ACTTAGTCTC	120
CTTGACAGA CAAGCTCACT TTCATGGCAT CTGTGGATA TTGTGTCGTA CCAGAGTGTG	180
CTAAGTTATT TCAGCAGCCA TTACCCGCGG TCCATCATCC TGGCAAAAGA ATCTTATGCT	240
GAATTAATCA TGAAGCTCCT AAAAGTGTCT GCGGGCCTTT CTATTCCTAC TGACAGCCAG	300
AAGCATCTTG ATGCAGTTCC AAAATGCCAA GCTTTTACTC ATCAGATGGT TCAATTCCTC	360
AGCACCTGG AACAAAATGG AAAAATCACC TTAGCAGTCC TAGAACAGGA AATGTCTAAG	420
CTCTTAGACG ATATCATTGT CTTAACCAG CCCGACATGG ACAGCCAGAC CCGCCACATG	480
GCCCTCAGCG GTCTCGAG	498

(2) INFORMATION FOR SEQ ID NO:1439:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 314 base pairs
 - (B) TYPE: nucleic acid

(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1439:

GAATTCGGCC	TTCATGGCCT	AGCAGGGAGA	GGGGTTCTGT	GCTCCTGAGA	TTAGTTCAGA	60
TGGTCTAACC	ATTGTTCTAT	ATGTGCATTT	TAGTTAATAT	TGTGTATTAA	AGGATAAGTC	120
TTAATGCTCA	AAGTATGTTA	AAAATAGATG	TAGTAAATCA	GTCCCTTTGT	GAATGTCCTT	180
TTGTTAGTTT	TTAGGAAGGC	CTGTCCTCTG	GGAGTGACCT	TTATTAGTCC	ACCCCTTGGA	240
GCTAGACATC	CTGTACTTAG	TCACGGGGAT	GGTGAAGAG	GGAGAAGAGG	AAGGGTGAAG	300
GGAAGTGGCT	CGAG					314

(2) INFORMATION FOR SEQ ID NO:1440:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 424 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1440:

CCAGCCGTCT	GCAGCTCCGG	CCGCCACTTG	CGCCTCTCCA	GCCTCCGCAG	GCCCAACCGC	60
CGCCAGCACC	ATGGCCAGCA	CCATTTCCGC	CTACAAGGAG	AAGATGAAGG	AGCTGTCGGT	120
GCTGTCGCTC	ATCTGCTCCT	GCTTCTACAC	ACAGCCGCAC	CCCAATACCG	TCTACCAGTA	180
CGGGGACATG	GAGGTGAAGC	AGCTGGACAA	GCGGGCCTCA	GGCCAGAGCT	TCGAGGTCAT	240
CCTCAAGTCC	CCTTCTGACC	TGTCCCCAGA	GAGCCCTATG	CTCTCCTCCC	CACCCAAGAA	300
GAAGGACACC	TCCCTGGAGG	AGCTGCAAAA	GCGGCTGGAG	GCAGCCGAGG	AGCGGAGGAA	360
GACGCAGGAG	GCGCAGGTGC	TGAAGCAGCT	GGCGGAGCGG	CGCGAGCACG	AGCGCGGGCT	420
CGAG						424

(2) INFORMATION FOR SEQ ID NO:1441:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 346 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1441:

GAATTCGGCC	TTCATGGCCT	ATAGGCCATG	AAGGCCGGCC	TTCATGGCCT	AGTCAGGCTT	60
AAGTTTAAATA	AATAGCAAAT	TGCATACAGA	TATTTACAAT	GATCGAAAGA	CAAACAGAGG	120
TCCTATCCGT	GCAGTCCCAA	CAATAAAGAC	AGGCATTGGC	ATAAAGTJTT	TATAAATTCT	180
TGGGTACAGC	TGTTCTGAAA	GTAAAGTTCA	CTTTCAATCC	TAAAAAAGT	CCGCTATTCC	240
TCCCTGGCTG	CTCTGGACTG	TCCTCATCCT	CTTTAGCTGC	TGTTGCGCCT	TCCGCCACCG	300
ACGAGCTAAA	CTCAGGCTGC	AACAACAGCA	GCGGCAGCAT	CTCGAG		346

(2) INFORMATION FOR SEQ ID NO:1442:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 591 base pairs
(B) TYPE: nucleic acid

- (C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1442:

GAATTCGGCC	TTCATGGCCT	AGGCTTCCCT	GTTCCCTCAG	CCCCAGTCGA	GAGGAAAGAG	60
AATCGGGCCA	CTGCCAGAAA	GAGAGTCAAG	CAAACCTGGA	AGGGCAAATC	TGAGAGTGGG	120
AAGGCCAAAG	GCCGAGGCCC	AGATTTAGTA	TTCAGTAGCA	GCGCCTTCGG	GTAGCAGGAT	180
GATTCTTTT	CCTGCCTGTC	TGCTGTGGC	TCTCTTCCCT	AAGGTACAGG	TTGGCAGGAC	240
CACCTCCGCC	TACTTCTCCA	CCATCCCTAG	CATGCCAGCC	CGTCCCAGA	TCAACCTGCC	300
AGTGGAGTCA	GGCAGTGCAC	TCCTGGAGCC	AAGAGGGAAG	GGCAGGGTAG	AGAGGGTATG	360
TCCAGTAGCC	TGGAGCTCCA	TGGTGGCTTC	ATGCCTCCCT	TCTCCCAGCT	CAGGTGCCCC	420
TGAGGGCTCC	CTCGGAACAG	TGCCTCAAAT	CCTGACCCAA	GGGCCAGCAT	GGGGAAGAGA	480
TGTTTGCAGG	CAAATGCAC	TTTATAGAGA	TTTTCTATTG	CTGGGAAGGT	GTGTTTCTCC	540
CACAATTGT	TTGTGAATAT	TCACTTGTTT	TATAAATGTC	TGACCTGTCC	G	591

(2) INFORMATION FOR SEQ ID NO:1443:

- (i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 526 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1443:

GAATTCGGCC	TTCATGGCCT	AGATTGAATT	ACCTGCCTCG	AGCTCCTGTC	CTTAGGTGAT	60
CTGCCCGCCT	TGGCCTCCCA	AAGTGCTGGG	ATTATAGGAG	TGAGCCACCT	GGCCCAGCTA	120
GCTTTTAAAG	TTCTGCCAGC	ATAGCCCCGG	GATGGGGTGG	GGGTAGACAG	GGCCTTAGGA	180
CTTTCATTTT	TAAAATGCTC	ACTCCACAGT	GAAGAAACAG	GTGATGACTA	TCCTGAATAT	240
TTGGGAAGCT	GTGTCCTAGA	ATTTTGGCC	TCAGTTCCAG	AACCCACAGC	TTCTTTACAA	300
CATGCTTCAA	GCCTGGGACT	GAGCTGCCAG	TAAATAAACC	CCTAGTAACC	TTAATATGGG	360
TTAATAAGAT	TAGGTGCCCC	CTCTGCACGC	TCCCCTGCCC	CTCCTCGTCC	GGGCACCTGT	420
TATGCTAGGC	CAGCATGTTT	GCAGCTTAGC	CAGGGAAAAT	CGTGGACCAA	GACAGGGCTT	480
TTCATCCACG	ACTGGCTAAA	AAGATGGCTC	TCAATAATAT	CTCGAG		526

(2) INFORMATION FOR SEQ ID NO:1444:

- (i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 279 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1444:

GATTGAATTC	TAGACCTACC	TCTCTTTTTT	TGTGGTCTCT	CCTTCATTCT	CTGTTCATTT	60
CTCCGTGAGA	TTTTCTGATT	AGTAGTTACC	TTCAGCATGC	CAGTTGACTT	GCAAACCTAC	120
AATCCAACCT	TTCTTCTACT	TTGTCTCTG	ACAACAGCCT	GGTTTGTAGC	TGATTCCAGG	180
ACTTCTTCAC	TTGGGTGGCC	ACTCTCATTA	CCACAGAGTT	CACTAGTCAT	GGTGAACACA	240
CCAGTCTTTT	ACACCTCCCT	CACTCCCAA	CCACTCGAG			279

(2) INFORMATION FOR SEQ ID NO:1445:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 644 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1445:

GAATTCGGTC	TTCATGGCCT	AGGGGAAGAA	AGGCACCTTT	CTCACAGGGT	GGTGAGAGAG	60
AGGAAGGGGG	ACGGGGAAAG	CCCTTTATAA	AAGCATCAGA	TCGGCTGGGC	ACAGTGGCTC	120
ACGCGTGTA	TCCCAGCACT	TTGGGAGGCC	GAGGCGGGTG	GATCGCGGGG	TCGGGGGTTT	180
GAGGCCGGCC	TGGCCAATAT	GGTGAGACCC	CGTCTCTGCT	GAAGATACAA	AAATTGGCTG	240
GGCATGGTGG	CGGGCACCTG	TGGTCCCGGC	TGCTTGGGAG	GCTGAGGCGG	GAGAATCGCT	300
TGAGCCCGGG	AGGCAGAGGT	TGCAGTGAGC	TGAGATCGCG	CTACTGCACT	CCAGCCTGGG	360
CAACAGAGCG	AGACTCCATC	TCAAAAATAA	AAGAAAGGCA	TAAATATTAC	ATTACCCTCT	420
GAATACTGTG	GTGTATACT	TGAGTTTSTA	TGTGTGTATA	TATATGTGTA	TAGGAGAGTA	480
AAAATAAAAT	GAAATTAGGA	TTTGCAGAGT	TATAATCATA	TAAAATTGAT	TACCCTAAAT	540
ATATCATTAG	GATATTATGT	TATTTACATC	TCTTATGCTA	ATTCTAATTT	TCTTTTATTG	600
TAGTATAGTA	GAATTGAGAT	TTGNNAAATG	AATTGGTCCT	CGAG		644

(2) INFORMATION FOR SEQ ID NO:1446:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 756 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1446:

GAATTCGGCC	TTCATGGCCT	ACCTCACCCG	GGCCGGACAC	GGACAGGATT	GACAGATTGA	60
TAGCTCTTTC	TCGATTCCGT	GGGTGGTGGT	GCATGGCCGT	TCTTAGTTGG	TGGAGCGATT	120
TGTCTGGTTA	ATTCCGATAA	CGAACGAGAC	TCTGGCATGC	TAACTAGTTA	CGCGACCCCC	180
GAGCGGTCGG	CGTCCCCCAA	CTTCTTAGAG	GGACAAGTGG	CGTTCAGCCA	CCCAGAGATTG	240
AGCAATAACA	GGTCTGTGAT	GCCCTTAGAT	GTCCGGGGCT	GCACGCGCGC	TACACTGACT	300
GGCTCAGCGT	GTGCCTACCC	TACGCCGGCA	GGCGCGGGTA	ACCCGTTGAA	CCCCATTGCT	360
GATGGGGATC	GGGGACTGCA	ATTATTCCCC	ATGAACGAGG	AATTCACAGT	AAGTGCGGGT	420
CATAAGCTTG	CGTTGATTAA	GTCCCTGCCC	TTGTACACA	CCAACCCGTC	ACTGACTTTT	480
ACCGCAGCTG	GAAGTGTGCT	CCAGGGCCTT	TCCATCTTTT	CCCCCACACT	CCCTTTGACC	540
CTGTGTGCCC	CTCAGAGGCC	AAATTCTTGG	GCTCAGGGAC	TGGCTTTCGG	CCTATTGGTG	600
GTGGAGCTGG	GGTTCTGGCA	AGGAATTTCA	GGCAGCGCTT	GGAGGCAATG	TTCCCCGAGA	660
GCAGTTCACG	GTGGTGATGT	TGACTTATGA	GCGGGAGGAA	GTGCTTATGA	ACTCTTTAGA	720
GAGGCTGAAT	GGCCTCCCTT	ACCTGGAAC	CTCGAG			756

(2) INFORMATION FOR SEQ ID NO:1447:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 359 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1447:

GAATTCGGCC	TTCATGGCCT	ACCTGCCTCG	AGGTCACTGG	GATCATCTGA	ACAGAAGTGC	60
ACAGGCTACT	TGTACAGAGA	AAAAATTAAT	ACTCAAAGGA	AATCTTCATT	TTTGTAGATTG	120
ACTTTGGGAA	TTTGAATTTT	CATCAGTGCA	AATATAAATT	TCTCTATCCT	GCTCTGAGGC	180
TAATTGGTAC	CATATTTTCC	CTTTGTGTCT	TGTGACTCTG	CCACATCCCA	TCTCATCCTG	240
GCCTCTGAGT	CAAGAACCCA	GTGAACTGAC	TTTCTAGTTC	TAGAAGTTCC	GCTGCAAGGC	300
CAGGAAAGCT	TGAGAAAGGT	ATTGTGGAAG	AAGCAAAGGT	AGACCCCAT	TCACTCGAG	359

(2) INFORMATION FOR SEQ ID NO:1448:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 146 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1448:

GAATTCGGCC	TTCATGGCCT	AGGGAAAATA	AGTTAATTCT	AAATCAAATC	TAAATATTAT	60
ACCTCATGCT	ATGGTTTTAT	TTTATTTCAG	TGCTGCCGTT	ACTTTTCCTC	CCCAAAGCAA	120
TGTGTTTTCC	AGCCACAACC	CTCGAG				146

(2) INFORMATION FOR SEQ ID NO:1449:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 308 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1449:

GAATTCGGCC	TTCATGGCCT	ACTTTTCAAA	AGCAGCTTTG	CTCTACTGAT	TTGGGTAAAA	60
GCTTAGTTGC	AGTTGGNTTG	GGAGGAAATG	GGAGCAGAAA	ATTTGAGAGA	GTGAGTGTAG	120
ACAACTCTTT	CAAGGAATTT	CGCTATAAAT	GGGAGTAGAG	ATCTGAAGAC	TGAATAATTA	180
GCAAACCTGAA	AAGTGGGAAG	ACGTAATTCT	CTTATTATTT	CATTTTCTT	AGTGAAATAA	240
GAGGTGAAGT	TCTCTGAGTA	ATAGGAGGGT	CAACAGGNG	TTAGAAGTTC	ACAAAGAAAG	300
GTCTCGAG						308

(2) INFORMATION FOR SEQ ID NO:1450:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 545 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1450:

GAATTCGGCC	AAAGAGGCCT	AGCATGTTGT	GGCTGTTCCA	ATCGCTCCTG	TTTGTCTTCT	60
GCTTTGGCCC	AGGGAATGTA	GTTTCACAAA	GCAGCTTAAC	CCCATTGATG	GTGAACGGGA	120
TTCTGGGGGA	GTCAGTAACT	CTTCCCCTGG	AGTTTCCTGC	AGGAGAGAAG	GTCAACTTCA	180
TCACTTGGCT	TTTCAATGAA	ACATCTCTTG	CCTTCATAGT	ACCCCATGAA	ACCAAAGTC	240
CAGAAATCCA	CGTGACTAAT	CCGAAACAGG	GAAAGCGACT	GAACTTCACC	CAGTCTACT	300

CCCTGCAACT CAGCAACCTG AAGATGGAAG ACACAGGCTC TTACAGAGCC CAGATATCCA	360
CAAAGACCTC TGCAAAGCTG TCCAGTTACA CTCTGAGGAT ATTAAGACAA CTGAGGAACA	420
TACAAGTTAC CAATCACAGT CAGCTATTTT AGAATATGAC CTGTGAGCTC CATCTGACTT	480
GCTCTGTGGA GGATGCAGAT GACAATGTCT CATTGAGATG GGAGGCCTTG GGAAACACAC	540
TCGAG	545

(2) INFORMATION FOR SEQ ID NO:1451:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 331 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1451:

GAATTCGGCC AAAGAGGCCT ACAGTAAGCA GATGAACTTG CTTGCTGTTC TCGAAGTGAG	60
GACTGAAGGG AACGAAACT GGGGTGGGTT TTTGCGCTTC AAAAAGGGGA AGCGATGTAG	120
CCTCGTTTTT GGACTGATAA TAATGACCTT GGTAATGGCT TCTTACATCC TTTCTGGGGC	180
CCACCAAGAG CTTCTGATCT CATCACCTTT CCATTACGGA GGCTTCCCCA GCAACCCAG	240
CTTGATGGAC AGCGAAAACC CAAGTGACAC AAAGGAGCAT CACCACCAAT CCTCTGTAA	300
TAATATTTCA TACATGAAGG GAACCTCGA G	331

(2) INFORMATION FOR SEQ ID NO:1452:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 263 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1452:

GAATTCGGCC AAAGAGGGAA GGGAAAATT CAAGTCAGAT AGAATTCTAT ATATACCATT	60
TCTTTGGAAC CTTAGCCCT CAAGATTCCA ACATCATGAC CTCAGTTTCA ACACAGTTGT	120
CCTTAGTCCT CATGTCACTG CTTTGGTGC TGCCTGTTGT GGAAGCAGTA GAAGCGTATA	180
TGCACGAAAA AGAAATGGAC AGATGTGACT TTGAAAGGCC TACTGAGTCA AACCTCACCC	240
TGAAAACCTT TGCAGCACTC GAG	263

(2) INFORMATION FOR SEQ ID NO:1453:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 558 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1453:

GAATTCGGCC AAAGAGGCCT AATTTTAAAG CCCTGCTAAC TTCAATGTCT AGGTCACCCA	60
TTTGTATT TTTATGGTCT TTTTTCATCC TGATTTTGG TCATTGGTC CCGTCTTATG	120
GCATACCTGG TAATATTTTA TTGAATCCTT AGTACTGTAC ATGAAAAATT GTAGAGGCC	180
CAGTAGTTTT CTTTCTCTGA AGAGGAGTCA CCCTTTCCTT CACTAGACAG TTATGTTGGG	240

GGTTATATAC	CTTACTCCAA	TCAAAGATTG	AGCTGAGTCA	GAAGTCTAAG	GGAGTTAAGT	300
TTTTGTGTCC	TCTGGGGACC	AGGGGTTCCA	ACTAAGACTG	TGATATTCAC	CAGGATCCAA	360
TTTCCCGATG	CCTCTTGAAC	TCTTATTCTT	ATCTTTTAA	CACATCAAGG	CAGCTGGTTT	420
GCATTTTCT	TTCTGTTTCA	CTTTTGTAGT	TCATCCTTG	CAGCTTTAGA	AATTGACAGT	480
TGTCTTACAG	GGAAAAGTAG	CTGTGTAACA	AGCTCATGTC	TCTGCCTCTC	TTCCACTGAT	540
ATCTTAGCCC	CGCAGGAG					558

(2) INFORMATION FOR SEQ ID NO:1454:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 328 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1454:

GAATTCGGCC	AAAGAGGCCT	ACCTAAACCG	TCGATTGAAT	TCTAGAAATA	CAATGATTTT	60
AAAAAAGATT	TCCAAAGGCT	TTTTCTTTT	TTCTTTTTTC	TNGAGACAGG	GTCTCACTCT	120
GTCGCCCAGG	CTGGAGTGCA	GTGACACAAT	CTCGGCTCAC	GGCAAGCTCC	GCACTGCCCC	180
CTCAGGTTCA	CGCCATTCTT	CGCCTCAGC	CTCCCGAGCA	GCCGGGACCA	CAGGCACGCG	240
CCACCAGGCC	CAGCCAATT	TTACATTTT	AGTAGAGACG	GGGCTTCACC	ATGTTGGCCA	300
GGATGGTCTC	GGTCTCTTCT	GCCTCGAG				328

(2) INFORMATION FOR SEQ ID NO:1455:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 481 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1455:

GAATTCGGCC	AAAGAGGCCT	ACTTGATGTC	TGTGACCCAC	ACNTATTTCG	ACACTCCCTC	60
CCCTTTTGAA	AATCCCTAAT	AAAAACTTGC	TGGTTTTTGC	GGCTAGTGGG	GCATCATGGA	120
ACCTACTGAC	ATGTGATGTC	TCCCCCGGAT	GCCCCGCTTT	AAAATTTCTC	TCCTTTGTAC	180
TCTGTCCCTT	AATTTCTCAA	GCTGGCCGAT	GCTTAGGGAA	AATAGAAAAG	AACCTAGGTG	240
AATATTGGGG	CAGGCTCCCT	GATGAAATGA	TATATATTCT	TAAAATAAAC	TTTTCATCTT	300
TGCATATACG	TTTATATGCC	GAGTTTTTCT	CAACCTTGTC	TTACAGCACT	TTGTATACTA	360
CATTCTAGCC	ATACTAAACT	CTTGCACTTC	CTGAGACATG	TGCTGTATCC	TATTTCTTCT	420
GGTCCTTTTC	TCATTGATTA	ACTACCTGGA	GCATACTTTT	AATTCAGTGT	CAGCGCTCGA	480
G						481

(2) INFORMATION FOR SEQ ID NO:1456:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 393 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1456:


```

GAATTCGGCC AAAGAGGCCT ACTTCACCTT CAAGTCCCCT TTCTCAAGAA TCCTCTGTTC      60
TTTGGCCCTCT AAAGTCTTGG TACATCTAGG ACCCAGGCAT CTTGCTTTCC AGCCACAAAG      120
AGACAGATGA AGATGCAGAA AGGAAATGTT CTCCTTATGT TTGGTCTACT ATTGCATTTA      180
GAAGCTGCAA CAAATTCCAA TGAGACTAGC ACCTCTGCCA ACACTGGATC CAGTGTGATC      240
TCCAGTGGAG CCAGCACAGC CACCAACTCT GGGTCCAGTG TGACCTCCAG TGGGGTCAGC      300
ACAGCCACCA TCTCAGGGTC CAGCGTGACC TCCAATGGGG TCAGCATAGT CACCAACTCT      360
GAGTTCCATA CAACCTCCAG TGGGATCAGC ACG                                     393

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(2) INFORMATION FOR SEQ ID NO:1457:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 266 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1457:

```

GAATTCGGCC AAAGAGGCCT AGTGTGTGTG TGTGTGTGTG TGTGTGTGTT TTATCTCCTT      60
CAACTCTGAC CACCTGGAAG TCAGCCTAAT CTCTGCCCTC GTGTTGATCT TTAATTCAAC      120
ATTTAATTAC CTATCTTGGT ATCCATATGA ATTTGATTGT TTTTTTGGCT TTTTTTGAAC      180
TCATAAAAGG TATCCAAGTT CCTGGAGGGC ATAGTGCCCA TCTCCTCCCA TCCACCAAGT      240
GACATTCTTT TCCAAAAGAC ACATGG                                     266

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(2) INFORMATION FOR SEQ ID NO:1458:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 292 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1458:

```

GAATTCGGCC AAAGAGGCCT AGGTTGTAGT TACTTTCAGA GTAGATACAG GGTTTTAGAT      60
CATTACAGTT TAAGTTTTCT GACCAATTAA AAAAACATAG AGAACAAAAG CATATTTGAC      120
CAAGCAACAA GCTTATAATT AATTTTATT AGTTGATTGA TTAATGATGT ATTGCCTTTT      180
GCCCATATAT ACCCTGTGTA TCTATACTTG GAAGTGTTTA AGGTTGCCAT TGGTTGAAAA      240
CATAAGTGTC TCTGGCCATC AAAGTGATCT TGTTTACAGC AGTGCTCTCG AG          292

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(2) INFORMATION FOR SEQ ID NO:1459:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 289 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1459:

```

GAATTCGGCC AAAGAGGCCT AGTTTTATGA GAGGGTTTCC ATTAAGAAGT TAATTGAAAT      60
TCTTTATTTA TGTAATATGA AATTTCATAT TAAATTATTT CACACAGCAT TTTTCCCCT      120
TAATTTTATT AGTTTTTTTA TTTCTTGCC GACCCAGGCC AGGAGCTTAG GGAAAATGAT      180

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GAGGCCTCTT TTACGCTGTA GTCCTGCAAA TGCTGTGTTT TATTCCCCCT CCCCTGCTCA 240
 GCACTCACCC ACGACTGACA CATGGGGTAC ACACACACAC ATACTCGAG 289

(2) INFORMATION FOR SEQ ID NO:1460:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 330 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1460:

GAATTCGGCC AAAGAGGCCT ACACCTGCGT TGGAACATCT GATCCAGTGA TAGCACGTCA 60
 CTAGGTGCCT TAATTAATAA AGCCAAAATA TCTTCCACT AGCAAACATA TCGTATTCAC 120
 TTTTACTCTC CCATTTTAA TTAATCTTTC CTATTTTATT TCACCCTCTC ATCTCTTCC 180
 TCTATTGAT TATCTCAGGT ATCTAATCCA ATTCACACT GTTTAATGAA TGTAATTGCA 240
 ACCAGTCTGC AATTCCTAAG GTTTGTGTTT TTTGCTTTT TCTTTTGTAG TCCATCTCTT 300
 TGCTACACTC AAGCAGGTCT AGAATTCGAG 330

(2) INFORMATION FOR SEQ ID NO:1461:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 383 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1461:

GAATTCGGCC AAAGAGGCCT AGGGACAGTG ATTATAGGAC TCCACACATG CAACTGAATC 60
 TAGCATTACT GACTTTAAAT TTTTGTAGCC TATCTAAAGG CCAGATGCTA TCAGCAGCTG 120
 AACGGCATCT ACCAAAACCA GCTGCAAAGA TAGAAGCGGA ACAACTGGTT TGGTGGAGAG 180
 ATTCGATAAC AACGAGTTGG GAAATAGGTA AAATAATAAC ATGGGGTAGA GGTTATGCTT 240
 GTGTTTCTCC AGGCCAAAAC CAGCAGCTGA TTTGATACC ATCAAGATAC CTGAAAACCT 300
 ATCATCAGCC AGATGCCAAG GAAGAGATT TGGGAGGAAC CCGAGGACCC CATGTTATTA 360
 TTTTACCTAT TCCCCAACTC GAG 383

(2) INFORMATION FOR SEQ ID NO:1462:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 375 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1462:

GAATTCGGCC AAAGAGGCCT ACGATGACGT CACCGTCACC ACCGGCGTGA AGCGAGACAG 60
 TGGTGAGGGC TTCTGGAAGT GATGGAGGAC CTGAAGACAT GAGGTGGAGG CACAGGTAGA 120
 AGAGAAGATT CTCACCATCG CTGATTCACA CAAAAGCATT TCTCCAAGTG GTTGACAGATG 180
 ACATGATTTT CCAAAGTGTT AGAGCTGAAG TGTGTTTCTT TGTGTATATA TACTGTGGTT 240
 CCTTTATCCC TTCATCTGTG GATAGACAGG TGCAACCGTG TGGTTCCCCA CGATATGATT 300

TCATTGTGGT TTTCTGTCTG AAGAGTATCC CAGTATGTAC CTGTGGAGCA GCTTCTTTAT 360
CCCTTCTTAC TCGAG 375

(2) INFORMATION FOR SEQ ID NO:1463:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 174 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1463:

GAATTTGGGC GGAGACACAA ATTCAAATCA TATCAACCTG GTAAAGAATT TGGATTTTAT 60
TTTGAGTGTG TTAGTGAGTA TTGCATGGCT TTGAGCAGAG AAAGGATGAT TTATATGTTT 120
AAAAGAGTGC TTTGCCTCTT ATATGTGGAA GAGATTGTAG GAGGAGGACT CGAG 174

(2) INFORMATION FOR SEQ ID NO:1464:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 122 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1464:

GAATTCGGCC AAAGAGGCCT AGTTGCGGTT TAAATTCCA AATGTATGGC ATTTGCTTGT 60
TTTTTAAGTT GATTCTAGT TTTATCACAT TGTGGTCAGA GAATGCTGAG AAAGAGCTCG 120
AG 122

(2) INFORMATION FOR SEQ ID NO:1465:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 315 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1465:

GAATTCGGCC AAAGAGGCCT ACTTGAGCTT TTTTCATGTG TATATATTTA TGCTTCTTTT 60
CTAAAAAAAA TTGAGATGGA AATTCACATA ACAGAATTAA CTAAAGCATA CATTTCATTG 120
GTATTTACTA CATTACAAT GTTGTGCAAT CATTACCTCT CTCCAGTTCT AAACATTTCA 180
TCACCCCAA AGGAACCCCT AAGCGGTCAC TCCCCACTCC ACTGTCTCCC ACAGCCCCCTG 240
GCAACCAGCA GTCTGCTTTG TGTCTCAATG GATTACCTA CTCTTGATAG CTCTACAAAT 300
GGAACAATAC TCGAG 315

(2) INFORMATION FOR SEQ ID NO:1466:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 175 base pairs
- (B) TYPE: nucleic acid

(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1466:

GAATTCGGCC AAAGAGGCCT AGGTAAGAGA AACGACCAAT TCTACCAGTT ATTCTACAAT	60
GTGGGTTTTT ACTGCTCTGT TCACATGCCT TATTCACTACT TCTTGTGGTG GTCAATTGCT	120
AGATGGTCTG TTGAATTAT CTGCTGTCTAT ACATCCAAAA AGGTCTCACA GAGAG	175

(2) INFORMATION FOR SEQ ID NO:1467:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 350 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1467:

GAATTCGGCC AAAGAGGCCT AGAAGGACAC CTCCATCCAT TCCACGCAGT TGCTCAAAGC	60
AGAAATTTTC AGTGCAAGTC TTGATGCTGC GCCGTCCCCC ACTCCCTACA TCAGAACGCA	120
TCCCTCATCT GGACTCCAGC GGTGGCTTCT TGATGTGCG CGGTCCCCCA CTCCCTACAT	180
CAGAATGCAT CCCGCATCCA GACTCCAGCG GTGGTGCTCT ACCTGCACGC TGTGCCAAG	240
TCCAAGCTAC CATACTCCTG CCTGAGCTAT GACAACAGCC TCCTCACTGA TCTCCCCTTT	300
CTTCCCTTTG CCTCCTCCAG CTCATTTTTC ACAGTGTAGA ATGACTCGAG	350

(2) INFORMATION FOR SEQ ID NO:1468:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 419 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1468:

GAATTCGGCC AAAGAGGCCT ACTATACTAA AATTCTGTGC AAAAAGATGC TTGAAATTAT	60
TGTAGAGACT GAATCTTTGC TGCTTGTTAT AAATATTGCA GGCATAAAC CTTCCATTCA	120
TAGGTTTCATC AGCTTTTATG ATTGGGAGTG ACAGGGAGGC AGCATTGCAG TCCTTAGTCC	180
TAGGTGTGGT CTAGAATTTA CCTGTATTT AAGTCACTTT GGAATAGAAG TTTTTTTTCT	240
CGGACAGGAT ACACTATATA TTTTAAATC TCCTCCCATG GTCGTAGTGC AGAGATATAA	300
ATAGAAGTAC AGGTAAGAGA TGTCTTCTGC CTTTCAAACC CTTCTAAGT TTGTGTGCTG	360
CTTTAACTTT ATTCACATAG AGCAGTCTGT TTTATTACTC AGGATATGGG CCACTCGAG	419

(2) INFORMATION FOR SEQ ID NO:1469:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 612 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1469:

GAATTCGGCC	AAAGAGCGAT	GGGGACAAAG	GCGCAAGTCG	AGAGGAAACT	GTTGTGCCTC	60
TTCATATTGG	CGATCCTGTT	GTGCTCCCTG	GCATTGGGCA	GTGTTACAGT	GCÂCTCTTCT	120
GAACCTGAAG	TCAGAATTCC	TGAGAATAAT	CCTGTGAAGT	TGTCCTGTGC	CTACTCGGGC	180
TTTTCTTCTC	CCCGTGTGGA	GTGGAAGTTT	GACCAAGGAG	ACACCACCAG	ACTCGTTTGC	240
TATAATAACA	AGATCACAGC	TTCCTATGAG	GACCGGGTGA	CCTTCTTGCC	AACTGGTATC	300
ACCTTCAAGT	CCGTGACACG	GGAAGACACT	GGGACATACA	CTTGTATGGT	CTCTGAGGAA	360
GGCGGCAACA	GCTATGGGGA	GGTCAAGGTC	AAGCTCATCG	TGCTTGTGCC	TCCATCCAAG	420
CCTACAGTTA	ACATCCCCTC	CTCTGCCACC	ATTGGGAACC	GGGCAGTGCT	GACATGCTCA	480
GAACAAGATG	GTTCCCCACC	TTCTGAATAC	ACCTGGTTCA	AAGATGGGAT	AGTGATGCCT	540
ACGAATCCCA	AAAGCACCCG	TGCCTTCAGC	AACTCTTCCT	ATGTCCTGAA	TCCCACAACA	600
GGCGCACTCG	AG					612

(2) INFORMATION FOR SEQ ID NO:1470:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 220 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1470:

GAAAAGCCAA	GACTTTAACT	TTCATTACAT	ATCTAATAGT	TGATATCACC	AGTTACCATT	60
TTGAATTTTG	TATAGTACTA	GGTTAGAACA	TTGCTTAATC	CTTTTAAAAA	AAATGCATTT	120
ACGTAGAACT	CGAGCAGGAT	GTTTGGCCCC	GATGTTTTTT	CTTCATACTC	TTCTGTGCC	180
TCTCCCATTT	TCTGCACAGT	TCTCACCCAC	TACTCTCGAG			220

(2) INFORMATION FOR SEQ ID NO:1471:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 349 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1471:

GAATTCGGCC	AAAGAGGCCT	AGGGCATCAT	GCAGACACAT	CTGTTAAAGC	AGGAAAAAAA	60
AAACCATGTG	GAAGATTAAG	CTAGGCAGAG	TGCCTGAAAA	GCCCTCTGCA	ATAAGTTGAG	120
CTGGAAAAAC	CTCCATATCT	AAAGATGCTT	TAATCATCTC	AAGAACACCA	ACAACATTTT	180
CTATTATAAT	ATAACTATGA	TAGATGTGAA	TCTACCTCTT	GGATTAAGGC	AATAATTTTA	240
TAGCTATCAA	ATTTTCACAG	ACACCATTTT	CACTACTCTG	AGTTGCATCT	CTAACAAGCT	300
TCTTTAGCCT	CTGCCTACAG	ATTTCAGTGA	CAAAGCCATT	CAGCTCGAG		349

(2) INFORMATION FOR SEQ ID NO:1472:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 310 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1472:

GAATTCGGCC	AAAGAGGCCT	ACAACAAACC	ATTCTTCAGC	ACCTTTGCAA	AAACATCTAT	60
GTTTGTTTTG	TACCTTTTGG	GCCTTTATTAT	TTGGAAGCCA	TGGAGACAAC	AGTGTACAAG	120
AGGACTTCGC	GGAAAGCATG	CTGCTTTTTT	TGCAGATGCT	GAAGGTTACT	TTGCTGCTTG	180
CACAACAGAT	ACAACATATGA	ATAGTCTCTT	GAGTGAACCT	CTGTATGTGC	CTGTGAAATT	240
CCATGATCTT	CCAAGTGAAA	AACCTGAGAG	CACAAACATT	GATACTGAAA	AAACCCCGC	300
GGTACTCGAG						310

(2) INFORMATION FOR SEQ ID NO:1473:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 297 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1473:

GAATTCGGCC	TTCATGGCCT	ACAACTTTAA	GATTAGCTAC	TTTGAATAAT	CTCAGTAGGT	60
TCTGGGGCAC	AGGAGCTGCC	CCTCTTGCTC	TGAGATTTGG	CCATGGGGTG	ATTAGGACAG	120
GTATAGTGGC	ACAGAGTGTA	AAAACCCCAT	AATGGTGTGG	ATTCTGGATT	GCTTAGTTTG	180
CATTTGACAA	GTGCATGCCT	GGGAGGAGGA	CTCCTCTTAG	TAAAGAGGAT	GGGAGGCAAG	240
AAGAGAGGCC	AGAGGCCAAG	ACAAGGTAAC	TTAGGCATAG	CATCAGGTTG	TCTCGAG	297

(2) INFORMATION FOR SEQ ID NO:1474:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 510 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1474:

GAATTCGGCC	TTCATGGCCT	AAAAAAGTAT	GCAACACTCA	GTTTATTTAA	TACTTACAAG	60
GGGAAATCAT	TAGAAACACA	GAAAACCACA	GTTGCAGCTC	GACATGGATT	ACAGAGTCTT	120
GGAAAAGTCG	GTATTTACAG	GCGTATGCCT	CCACCTGCTA	ACCTCCCAAG	TCTTAAAGCA	180
GAAAACAAAG	GCAATGATCC	TAATGTAAAC	ATTGTACCTA	AAGATGGCAC	AGGGTGGGCA	240
TCAAAACAAG	AGTAACATGA	AGAAGAAAAA	ACACCAGAAG	TGCCACCAGC	ACAGCCAAAA	300
CCTGGGGTTG	CAGCTCCCCC	AGAAGTAGCA	CCTGCTCCCA	AATCATGGGC	CAGTAACAAG	360
CAAGGTGGGC	AAGGAGATGG	AATCCAAGTG	AATAGTCAGT	TTCAGCAAGA	ATTTCCCGAGC	420
CTGCAGGCAG	CTGGGGATCA	GGAAAAAATA	GAAAAGGAAA	CAAAATGATGA	CAACTATGGA	480
CCTGGACCCA	GTTTACGTCC	ACCACTCGAG				510

(2) INFORMATION FOR SEQ ID NO:1475:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 400 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1475:

GAATTCGGCC TTCATGGCCT AATCCATTCA TTTGATGGAC ATTTTCTAAG TACCTGTGAG	60
CCAGGTGCTG CCATTTCAAA GTCTCTTCTT ACCACGCTCC TCAGTGGCTA GACATTTTCA	120
CGTGGCCAGA AAGTCCCGAC TCTTGCTGGG CGTCCCTGGA CAAGTTGCCT TCCTCCTCTG	180
AGCTTGCGCG TCCCCATCTG TATAGTGGAG ACCCTTGGCC CCCCTCTGTA CGGAAGGGCC	240
GATGCGAAGC TGCAGTTAAA AAAGGCTCAC ATGCTCCTAG CCTTGTGCAG TCAGGAGGGG	300
AGACCAGGAC AGTTGGAAAT TATGATTGCA AATGGCTTTG CATTTTAGAT CATTCGTGTG	360
TGTGGATCAG AGAAACGCAC AAGTTCCTG GCATCTCGAG	400

(2) INFORMATION FOR SEQ ID NO:1476:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 465 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1476:

GAATTCGGCC TTCATGGCCT ACCACATTTT GTCAGCAGAG AGCCTTTTAA ACTTGGATTC	60
CAACTTCCTG TTGTCTAAAC GGAACCCCTCC GAACGTAGGA CTTATAGGGG AAGCTGCTGT	120
GCATGTCAA AAAACTACTA ATCAGAATGA GCTTGTGCAT CCAGAGCCAG AACTGCTGCA	180
GAAATTTTTA TAATTTTGCA ACTTCTTTT TTACAAGGAA CTTTGTGCT ACTACACATC	240
AGGACTTTTG AAGCATCCAA TAAATCCATT TAATAAGTAT GAGCATGTGT CTGAGTGGAC	300
AAGAAAGTGA AACCATCCAT GCTACATTGG ATAATTTTC CTCCCCAGA CTGGACAGGG	360
AATCTCAGCT TTCAAACAG AGTAACCTGG CTCCACTTAC AAAGCTGCAC AGGCATTAAA	420
GATCGTGTG CCTTTGTTAG GCAGATTGAG AGGGGAGAGC TCGAG	465

(2) INFORMATION FOR SEQ ID NO:1477:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 377 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1477:

GAATTCGGCC AAAGAGGCCT ACATGTAGCT ATCCTAAGAC GTATTTTATT TTGAGCCACT	60
TTCTCAGAGG GAATGGGTG GGTGTGGTCG TAAGAACACC TAGAAAATAG GGGTGAAACC	120
TTTATGGGGC CAGGGGAGCC ATGGCAGAGG GTGGAGTGGG GGATAGAAGC CTTCAGACTC	180
CTCCGCCCCA GCCACTCTGC ACCTGGGGCC TTTGAGCTGT TAAAATGAAA AGCCAATTAT	240
CTTCTGTAAA TGAGGGAAAA AAAGAAGGAA TAAAAGTGC TATTATGTAT GCTGATATGC	300
ATAACACTTC AAATAAAAGG ATATATAAGC ACTTGACAAA TTGAGGGAGA AGGAGGGGAG	360
AGTGCTGGGC GCTCGAG	377

(2) INFORMATION FOR SEQ ID NO:1478:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 280 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1478:

GAATTCGGCC AAAGAGGCCT AGAGATTCAG TTTATTCTAT ACTCAGACTT TGGTATCCCC	60
TTAGATGCCC ATGTCAAAAA TGAGAAAGTT GGTGACATGG TATGGCATT TATTGCTTTT	120
TGTTTGT TTT CCATTGCTAC TTTCACTCAA ATTCCAAGGA AATCACAGAA GAAGGGCTTT	180
TGGTGACCTA AAAGTAGAAA TGAAAGCAAC AAAATGCATT CTGTCCAGCA GTACACTGAA	240
GACAAAAAAT GTAGTTGAAA AGTCTCAGGG AGCGCTCGAG	280

(2) INFORMATION FOR SEQ ID NO:1479:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 491 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1479:

GAATTCGGCC AAAGAGGCCT AATTGCTTT GCCCAGTAGT TGGAAAGTGA ACTCGACTCG	60
TGATGGTTCT CCTGTCACTT TGGTTGATAG CAGCCGCTCT GGTAGAGGTT AGGACTTCAG	120
CTGATGGACA AGCTGGTAAT GAAGAAATGG TGCAATAGA TTTACCAATA AAGAGATATA	180
GAGAGTATGA GCTGGTGACT CCAGTCAGCA CAAATCTAGA AGGACGCTAT CTCTCCCAT	240
CTCTTCTG CAGTCACAAA AAGAGGTCAG CGAGGGACGT GTCTTCCAAC CCTGAGCAGT	300
TGTTCTTTAA CATCACGGCA TTTGGAAAAG ATTTTCATCT GCGACTAAAG CCAACACTC	360
AACTAGTAGC TCCTGGGGCT GTTGTGGAGT GGCATGAGAC ATCTCTGGTG CCTGGGAATA	420
TAACCGATCC CATTACAAC CATCAACCAG GAAGTGCTAC GTATAGAATC CGGAAAACAG	480
AGCCACTCGA G	491

(2) INFORMATION FOR SEQ ID NO:1480:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 523 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1480:

GAATTCGGCC AAAGAGGCCT AATTCATTCA GTCGTCATGA GTTGAGTGCT TACTACATGC	60
AAGGCACTCT GCTAGTTATA TTCTAATAAT GCAGAGATAA TTAGACATGG TTCCCGCCCT	120
CAAGAAGCTC ACAAAGTAT TCAGGAAATA ATGCAGACTA GTGATTTTGC TATAAAATTA	180
TTTTTGAAGG AAGCAGACAC AGCAGTATTT ACCTGTAGGT GGAGCAAGTA ATAAGCCATG	240
CTGTGCAATA TATACATAAA GCTTCTGCTT CTCATGGGAA TTTAGTTACA GTGCTTGGAA	300
TGAGAAGGGG AAGGAAAGAA TTAACAAATG CCAAGATTTT TGGAGCAGAT TGTACAGCTG	360
TGACTTTGGA AAACAGAAAG TAAGACCCTC AGAAAACCAA TGAAGTCTAA GAGAAATAAA	420
ATTTAGTGA CAGGTATGAA AAGTGAATT GCGCCTAACT ACCAGATGGA GACCTTCAGA	480
ATGGGCTATC CTTAGAGTCT AGTACATCAA GAGACCCCTC GAG	523

(2) INFORMATION FOR SEQ ID NO:1481:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 104 base pairs
- (B) TYPE: nucleic acid

(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1481:

GAATTCGGCC AAAGAGGCCT AAAAAAAAAA AAAAAAGAAG ATATAAGCTA CTAGTATCAA	60
AAATGAAAGA GGGGCTGTTT CTACTGATCC TGCAGACACT CGAG	104

(2) INFORMATION FOR SEQ ID NO:1482:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 337 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1482:

GAATTCGGCC AAAGAGGCCT AAAGTGAAGT AAGAGATGCA CCTGAGAAAA CCTTGGCTTG	60
CATGGGTTTG GCAATACATC AGGTGTTAAC TAAGGACCTT GAAAGGCATG CAGCTGAGTT	120
ACAAGCCCAG GAAGGATTGT CTAATGATGG AGAAACAATG GTAAATGTGC CACATATTCA	180
TGCAAGGTGA GGAATTTGAT GTATTAAAGT ATTACTTAGA ATGGGACATT GAAGGCCATT	240
TAAGAATGAA NACGCTCATT TTATAAAAAT GAGGAAATCA GTAAAAAGGA CATGAGTTCC	300
TTGCCATCTC ATTGATCATC ACACTGAACA ACTCGAG	337

(2) INFORMATION FOR SEQ ID NO:1483:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 168 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1483:

CGATTGAATT CTAGACCTGC CTCGAGAGCG CGCTGTTGAA TACCCAGTAT GATGGTCCTT	60
AGCCTTCTTA GACCTTTCCT GTACCACTAC CTCTATGCCT TTTGCCAAGT CCAAGTGTTC	120
ACCAGAAATG GAACTGATGC CAGAAAGACT ACAGCAACAA TACTCGAG	168

(2) INFORMATION FOR SEQ ID NO:1484:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 478 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1484:

GAATTCGGCC AAAGAGGCCT AGCAACCGCG CCTGGCTGCC TTTTCATTTT TAAAAACGTC	60
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AGTGTGCTC	CCACACAACA	TGCAAACCCT	CCTGCCGAGC	TGCGACCTTC	GCCTGTCACG	120
GAACCTGGTG	CTGAGTGTGG	TGAGAGTGAA	TCCTGCAGCA	CGTGGCGCAC	TGTCGGCCTC	180
TTTCATGTTT	AGCTTTTGAT	TGTGCTTATT	GTCCATTGT	ATTTCTTCTT	CTAAGTGTCT	240
GTTCAAGACT	TTTCCGTCTT	GGCTGGAGGT	GGGAGGTGCC	TGCTCCTGTG	TTTTCTGGCA	300
TCTTTCTCTG	CTGTCTTTGT	GTGTCTGCAC	TCAGGGAGTT	TCCCTGGGGT	GTGTGCCTAG	360
AGAGGTGCTG	GTTGTACATT	TCAACGTAGG	GACAGATTCC	CAGCGTGTCT	TTAAAGGAGC	420
TGTGCCGCTG	TGTGCTCACT	TGACTCGCCG	GCGTTCTTGT	TTCTCCAGGC	CTCTCGAG	478

(2) INFORMATION FOR SEQ ID NO:1485:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 307 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1485:

GAATTCGGCC	AAAGAGGCCT	ACACACTGCA	AGAACAGAGC	CAAGAACCTA	CCATGTACCC	60
TTTACTTGGA	TTTATCATT	CTGTTTTGCA	CATTGCTTT	ATCATTCTTG	TTATATTTAC	120
ATATAGTTCC	TTCCCCTTGG	ATTATTTGAG	AACAACTGC	AGAACTCACA	CCTCTTTCCTC	180
CGAAGAACTA	GGCATTAGCA	CATTACAAGA	ATACGATGAT	AGAGATCAGA	AGTTAAATGC	240
TGATGAGATA	TTCTGTCTA	ATCCACGAAC	CTTATTTTAT	TGTCATCAGT	TGTCCCAACA	300
GCTCGAG						307

(2) INFORMATION FOR SEQ ID NO:1486:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 579 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1486:

GAATTCGGCC	AAAGATTGCT	GTCTTCAAC	GTGTTTCTTA	TGAAGTTATT	AGTAATACTT	60
TTGTTTTCTG	GACTTATAAC	TGGTTTTAGA	AGTGACTCTT	CCTCTAGTTT	GCCACCTAAG	120
TTACTACTAG	TATCCTTTGA	TGGCTTCAGA	GCTGATTATC	TGAAGAACTA	TGAATTTCTC	180
CATCTCCAGA	ATTTTATCAA	AGAAGGTGTT	TTGGTAGAGC	ATGTTAAAAA	TGTTTTTATC	240
ACAAAAACAT	TTCCAAACCA	CTACAGTATT	GTGACAGGCT	TGTATGAAGA	AAGCCATGGC	300
ATTGTGGCTA	ATTCCATGTA	TGATGCAGTC	ACAAAGAAAC	ACTTTTCTGA	CTCTAATGAC	360
AAGGATCCTT	TTTGGTGGAA	TGAGGCAGTA	CCTATTGTTG	TGACCAATCA	GCTTCAGGAA	420
AACAGATCAA	GTGCTGCTGC	TATGTGGCCT	GGTACTGATG	TACCCATTCA	GGATACCATC	480
TCTTCCTATT	TTATGAATTA	CAACTCCTCA	GTGTCATTTG	AGGAAAGACT	AAATAATATT	540
ACTATGTGGC	TAAACAATTC	GAACCCACCA	GTCTCGAG			579

(2) INFORMATION FOR SEQ ID NO:1487:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 352 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1487:

GAATTCGGCC	AAAGAGGCCT	AGATTGAATT	CTAGACCTGC	CTCGAGAGTC	ACGCTTAGTT	60
TGCCATTGTG	CCAGCTAGTG	ATATTGCTGA	TGTTTTTTGT	GGGTGTTCTT	TTAGCAAAAC	120
GTGAATGAAT	GCATGTTTAC	AGGGATGCTC	TGGACTGGAG	GATGGTGAAA	TCCATCGTGG	180
TTGTCCCTCT	CCCTGAATGT	CCTTTTGTAG	CCAGGGCATC	TTTCCAATAT	GAATTATTAA	240
GCCTTAACCT	ACATTTTTCG	ATAACTTATA	ACTCTCCATT	ATATATTTGG	TTACATTTCT	300
TAGATGTTTT	CAACATTCTT	TATTAAAGTT	ATTTTATCAG	CATCCGCTCG	AG	352

(2) INFORMATION FOR SEQ ID NO:1488:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 422 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1488:

GAATTCGGCC	AAAGAGGCCT	ACAAATGGGC	AGAAGTGAAA	CAGTCTTGTTG	AGATACCTGT	60
TTTTTAAAC	TCCATTTTAG	AAAAGGAATT	AACTAGGACT	TTATATCTCT	TCGTTCATA	120
TAATTTTAAA	GAAGAATTGT	TGAAAAGTAG	ATATGTTTTG	CCATTGCTG	AGAATATTTT	180
GTACGTTAGC	TTGTCTCTTA	CAAAACTAA	ATGTGTTCCCT	ACTTCTGATA	ATGTATGTCA	240
ATTTAAAATT	TGGAATGGCC	AAGATAAGTT	GCTCTGCATC	TGTCCTTCAT	ATGGCTCCTG	300
AGCACAGCTC	AGTGACTGGC	CCTTGCACTG	CTTCTACCGT	TGTAATGGGT	AAAACCAGGG	360
GAACTGCCT	TGCTCTTGAG	CTTGAGCAGG	TTAATCAAAA	GGATAGAGCT	TCCACTCTCG	420
AG						422

(2) INFORMATION FOR SEQ ID NO:1489:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 293 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1489:

GAATTCGGCC	AAAGAGGCCT	AGAGAAAGAG	AGAAAGAAAG	GAGGGAAGGA	AAGGAAGGAA	60
GGAAGGAAAG	AAGGAAAGAA	GGAAAGAGAG	GAGACTGAAG	GGCCAAGGAG	GGCATACAAT	120
GGAAGATGAG	AGCTGTGCTC	CCGGGAGGCT	TGTACTCATC	AAGAAAGAAA	GGAGAAAGAG	180
GGGGAAGAAA	AGAAAAAAGA	AGAATAAAGA	AAGGAGAGAT	GAAGGAATAA	AGGAAAAAAG	240
GTAGAAAGGA	AAGAAGGAGA	AGGGAGAGAA	GAAAGTAGGA	AGGAGAACTC	GAG	293

(2) INFORMATION FOR SEQ ID NO:1490:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 250 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1490:

GAATTCGGCC	AAAGAGGCCT	AGTGCAACTA	CAGATAAGTA	AACTTCGACT	GGGTTTAGTA	60
ACACCTGTCT	TTAATATTTG	TCAGTGTACC	TACATTGATA	ACATTGACCT	TTGGAAAAAT	120
TGGACTTGTA	TTGTGTTATT	TCTCTAGCAT	ATTAGTCCTA	AAAAAGTGTG	AGTAATAGGA	180
GATGGAGAGG	TGTTTGTGGA	TTGTCATTCT	GTGGTTCCTA	CAGCATTCAA	GTTGCGTCCG	240
TACGCTCGAG						250

(2) INFORMATION FOR SEQ ID NO:1491:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 435 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1491:

GAATTCGGCC	TTCATGGCCT	AATTCTTAGA	AATAAGCCA	CTATCATGCA	GGTTATTTAC	60
AAGTAAAAAC	ATGGAGTCAG	CCCAGTAGAG	AAACGTTCAA	ATAGTGTGGC	TCCTGCTCTG	120
CCACGTTCTG	TTTATGACTT	TGGATATTTT	ATTTATCCTT	TCTGGGGTAG	TTTTTCAACT	180
TTAAGGTCCT	AATAAACTTT	TAGATTTTAT	GACCTGTCCT	CTTTAGCCCT	GTAAGATTTA	240
AATATTATAA	AGAACCTGAT	TTCAAAGACA	CTGGTAAACT	TGGACAACCTA	AACAAGTCCA	300
AGTATGGTAC	TTATTTGTGT	GTGTGCATAT	ATTAACCTTA	TGCATATGCT	GTTTTACAC	360
CTATTTAAAC	TGTTTTTGAA	AAACGTATAT	ATCAGTTTTT	GGAAAACAGA	AGAAGATTTT	420
AAACGGCTAC	TCGAG					435

(2) INFORMATION FOR SEQ ID NO:1492:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 360 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1492:

GCGATTGAAT	ACATGTTCAA	TAAGGACAAT	GGACAGGCAC	CTTTTACCAT	CACTCCTGTG	60
TTTTCAGATT	TTCCAGTCCA	TGGGATGGAG	CCCATGAACA	ATGCCACCAA	AGGCTGTGAC	120
GAGTCTGTGG	ATGAGGTCAC	AGCACCATGT	AGCTGCCAAG	ACTGCTCTAT	TGTCTGTGGC	180
CCCAAGCCCC	AGCCCCCACC	TCCTCCTGCT	CCCTGGACGA	TCCTTGGCTT	GGACGCCATG	240
TATGTCATCA	TGTGGATCAC	CTACATGGCG	TTTTTGCTTG	TGTTTTTTGG	AGCATTTTTT	300
GCAGTGTGGT	GCTACAGAAA	ACGGTATTTT	GTCTCCGAGT	ACACTCCCAT	CGATCTCGAG	360

(2) INFORMATION FOR SEQ ID NO:1493:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 271 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1493:

GAATTCGGCC TTCATGGCCT AAGCAGACAA TATAGTAGTA ATTTAAATTT TTGTTTCCTG	60
ACTTTCTGTA GTCCTTAAAC AAACAACAAA AAATCCTAGT AATCTTAAAC TTTTACATTA	120
ATAGAGATCC AAGAGAAAAT AAGCCATTTT TCACCATGTG GGACCCAAAT AAATCATAGA	180
CATGGTATTA AGAAGCCCTT TTCAGTCTGG TTGCAGTATT ATTTTCCTAC CTTTCTTTTT	240
CCTGTTCCCT GCTGTATGCC CACAGCTCGA G	271

(2) INFORMATION FOR SEQ ID NO:1494:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 310 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1494:

GAATTCGGCC TTCATGGCCT AATGGGTCAG AAATTTGGGC CTGGCTAAGT GGATCCTCCA	60
CCCCAGGGTC TCTCACAAGG CTGCAATCAA AGGGCTGACT AGGACTTGGA ATCTCATTTG	120
AAAGTTAGAT TGGGGAAGGA TCTGCTTCCA AGCTCACTCA GTAGTTACTG GCAGGATTAG	180
GTTTCTCCAA GGTCGTTGGA CTAAGGGTCT CAGTTCCTCA CTGACAGTTG GCCTGAGGCT	240
GCCTTCAGTT TCTTGCCATG TGGGCCTCCC CAGCATAACT GTTTACTTCA TCAAAACAAA	300
CAAACCTCGAG	310

(2) INFORMATION FOR SEQ ID NO:1495:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 138 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1495:

GAATTCGGCC AAAGAGGCCT ACGTCGATTG AATTCTAGAC CTGCCTCAGC TCTAATTATG	60
GTTTCATGTTA GATTGTCTGC CCTTCCTCTT CCTCTCTCT TTTGGGGAAA GATAATAGCA	120
CTTAATAACG CCCTCGAG	138

(2) INFORMATION FOR SEQ ID NO:1496:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 102 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1496:

GAATTCGGCC AAAGAGGCCT ACAAATTTGT TCCTTTTACG TACGACAGAC TTCTGAAATG	60
GTAAGTAGTAG TAGTGCCCTT TTTTCTTCTC TTTTGTAGCC AG	102

(2) INFORMATION FOR SEQ ID NO:1497:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 483 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1497:

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GAATTCGGCC AAAGAGGCCT ATTTGTTTCT TTGTACTGCC TAACTTTAGA AAGACCTGNA      60
ANCGGTANCA TGAAAACATT TTTAGAGAGA ATTACCAGGC ATTTTGGTA GAATGAGTGT      120
TTAATGGAAC AGTCCAGAGA ACTCATCAAA GATGTTTATT AAAACGCGCA GACCTGCTCC      180
AATTAAGGGC CCAGTCAGTG GTGTTAACAG TGAAGGGACT GTTCCAGAGG CGTGCTGCAC      240
GGGACGCCCC CCCCAAATAC AAATGGTTTG CCAGTAGCTC ACAAATGAAC CCCATTGCCT      300
TGCACCTTAAG CTTCTGAAG CACATACATA TCCTGCTTTG TGCTTTCCGC CCTATAGTAA      360
ACGCAAACCA ATGGAGATGT GAAGCAATCT AATAGCAACA AGGCAAACCT CTACTTCCTC      420
TAAAGAGGAT TGCATCCTCT TGCTATCTTT GCCGATGCTC TCCTACAGAC CCATCCGCTC      480
GAG                                                                                   483

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(2) INFORMATION FOR SEQ ID NO:1498:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 144 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1498:

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GAATTCGGCC AAAGAGGCCT AAAATTTCAA TAGGCTATAG AGTTTCCAT GAGAGTGTGT      60
GTGTGTGTGT GTGTGTGTGT GTGTAAAGAA CTCTTACATT TCAGTGAGAA AATATTTTCA      120
TTGAAAGGAA ACACAGAACT CGAG                                                                                   144

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(2) INFORMATION FOR SEQ ID NO:1499:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 418 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1499:

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GAATTCGGCC AAAGAGGCCT AAAATAACTG TCCAATTAAC TGAACACTGA GGTAGCTGGG      60
TACAGACTTT AGCGGCTACA TTTGACAAAC ATTGCAATTA CAAGCAGCAA CACAAACCAA      120
CCTTGGGATG GGGATAGAAA TCTTTTNTT CTCNTTCTT GGGGGTTTGA GACAGAGTCT      180
CGCTCTGTCA CCCAGGCCGG AGTGCACTGG CGCAATCTCC GCTCACTGCA AACTCCACCT      240
CCTGGGTTC AAGTATCCTC CTGCTCAGC CTCCAAGTA GCTTGGATTA TGGGTGCCCCA      300
CCACCATGCC TGGCTAATTT TTGTATGTTT GATAGAAACG GTGTTTCACC CTGTTGACCA      360
GGCTGGCCTT GAGCTCCTGA CTTCAAGGTGA TCCACCTGCC TCAGCCCCC GACTCGAG      418

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(2) INFORMATION FOR SEQ ID NO:1500:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 337 base pairs

(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1500:

GAATTCGGCC AAAGAGGCCT ACAAAGACCA AGGTATCACA TTCTGCCATT AGCTGCTACC	60
TCTCCCTTCC CCATTTTCAG ACAGATTGAG CCCACTTTTT GTGTCCTCCT CTGCTCTTAA	120
GCTGTTTCTC ATCGTGGGTG CTCAGCAACT TGTCTGCTCT CACTCTAGTT TCTATTGCT	180
TCCCTGAAAT TAGCCTTTAA CTATGCCAG ACAAGCCAGA GCCTTGCTTA AACTTCTAAT	240
TCCTCTGTGC TTCTTAGTGT ATCCTTTCTG CCTGCTTGCC TGCTGCCTT CCTGCCTGCT	300
TGCCTGCCTT ACTGACCTT TGCCCCACGC TCTCGAG	337

(2) INFORMATION FOR SEQ ID NO:1501:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 105 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1501:

GAATTCGGCC AAAGAGGCCT AAACCGTCGA TTGAATTCTA GACCAGCCTC ATCTCCTGTT	60
CCTCTCTCCC TCCCAACTAT GTTGGCCTCC CTGCTGCTCC TCGAG	105

(2) INFORMATION FOR SEQ ID NO:1502:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 701 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1502:

GAATTCGGCC AAAGAGGCCT ACTGTGAACC TAAAACTCCT ATAAAGAAAA GTAAAGTCTT	60
AAAAACAAAC AAATACACAG CAACAATCTT ATTTTCCCCA GCCTGTCTTA TGTTAGGGTG	120
CAGATGTGAT TTCTGTGTGG CTAATCAGAT GCCCTGTGTG GAGAGACTGA TTTGAACAGA	180
GGCAGGGGCA TCCATCTTTC TAGTGTGAGT CACAGCAGAA GCAGTGAGGT CCTGGTGTCT	240
GTCGCTGCAG TGGTGGCTTT TGATACAGGA GTTCCCTGAT GGCAGTAGCT TCTTTGTGGG	300
TTCAGTTCTG TTGTGTGGTT CTGCAAGTTC AGCTTAGAGT CTGTTTCTTC AGCTGTTTCA	360
ATGACCCTCT GAGCTGTCTA CCATGAAAAA TTCTATCCTG CTTACACTAA TTAGAGCCAA	420
TCCTGTTATT TACAAATGAA TATCCTGACC AGTAATGAAG GTCTAGACTT AACTGTAATA	480
TTTTATGACT TAAATTGTTG GCATATGTGA AAACCTTTTG TTTATTCTAA ACTTTTTTGT	540
TGTTGTTGTA AAATAAAACA TTTATGAAAA GCGCACCAAA AAGGATAACA AATGAGAGTA	600
ATGCAACATA CAGGCACCAG CAACTCAGGC CAGGGAGATG ATATATGAGC ATCCCCAATC	660
TCCCTTTTAC ACTCCCTCAA ATAACCTAAT CAAGACTCGA G	701

(2) INFORMATION FOR SEQ ID NO:1503:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 257 base pairs

- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1503:

GAATTCGGCC TTCATGGCCT AGGAACTAGG TGA	60
TTTGGG GCTCATCTCA CAAGTTTCCT	
TACACTTAGG GATCAGTCTT TTGCTTCCTG	120
TTGCTCCTCTG CCTGAAAGTA GTTGCCAAGT	
TGTACTGTTT TATATATCCA CCACAGCATG	180
AGTTAAACCA AAGTCTGGAT CAGCAGACTG	
CCAGATTTT TTTTAACAAA TTTATTAATC	240
AATACATTTT GTCCATGTCT ACAGTTGTTT	
ATGGGGGAGA ACTCGAG	257

(2) INFORMATION FOR SEQ ID NO:1504:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 277 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1504:

GAATTCGGCC TTCATGGCCT AGGGGACCTT GGG	60
GAGAAATGT AATCCCTGCC CCTAGTCTCA	
GTTTCTGCAT CCACGGAAGA GGGGTGAAGA	120
TGGTCCCTAC CCCTCCAGAA TGTTCTTTT	
TTTTTTTTT AAAAAAAAAA AAAAAAAAAA	180
AAAGTACGTT ATGTTTTTCAG ATAAGAACAC	
TTCTTCATGG ATGACTTGAA ATAATTGCCA	240
TGGTCCCTAA GTTTTCCTCT CTGTAGATGA	
ATGATATAGC TCAGTATCTA AGCAGTGGAT	277
CCTCGAG	

(2) INFORMATION FOR SEQ ID NO:1505:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 341 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1505:

GAATTCGGCC TTCATGGCCT AGACCTGCCT	60
CGAGCCTCCC AAGCTGCTGG TATTACAGGC	
GTGAACCACT GCACCTGGCC TAATACGATA	120
TTCTTACAAT TTAATAATG AAAGCAGAGG	
AATGGTGGCA GGAAGCTGA CATTTTAAGA	180
GTTCACTTCC TTGTAGTTAT CACAGTTAAT	
TCTTACTGTT AGAATAAGTG GTAACCTGCC	240
AAGGTCACAT TGCTAGATGT CAGAGCAGAA	
ATTAGAAATC AGGTCTAGCC AAGGCCATCA	300
CACCTTCTCAG AGCATTAAAC ATTCAATTCA	
GTTAGTGTTT ATTGAACACC TATTGTGTTC	341
TGGCCCTCGA G	

(2) INFORMATION FOR SEQ ID NO:1506:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 270 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1506:

GAATTCGGCC	TTCATGGCCT	AGGCATTTTG	TCTCTAGAAT	TACCCACCCG	TTCTGCGCT	60
CTACGGTTCT	CCATGCCCCC	TCCAGTTTGG	GGGTCTAAAC	CGAACAGGAG	AGGTGCAGGG	120
GACCAGGAGG	TGTCCTGGCA	CAAAGGTTTC	GGGGTCTCCC	TGGCAAGGGG	TCCCAGGGCC	180
TGGAGCCCGA	GGCCAGCCA	AAAGCACACA	GCATCAAAAC	ATGTTTTTAG	TGGGAAGCTC	240
CAGGCCCTGC	CCCTCCCCGG	GGGCCTCGAG				270

(2) INFORMATION FOR SEQ ID NO:1507:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 462 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1507:

GAATTCGGCC	TTCATGGCCT	AGAGCAGGAA	GATTGTGTGA	GTGCTGGGGT	TTGGGGGTGC	60
CCAAGTTGGG	AACCAGTGGA	GGGAGAGAGA	GGTAGGAGGT	AGATGGATGG	AGATCAAAGG	120
CCAGGCCTGT	GGCCAAGGGG	GCTGCTAACC	CTTCAACCCT	GTGTTAGCCT	GTACACTCAC	180
CAGGCCAGGC	TCAGCAGGCG	GGCTGTTTAC	CTCCTGGCAG	CAAATGGTCC	AGAATGTGCC	240
CTCGCTGCAG	CCCAGCTGGC	TCCAGAAGGG	GGACCACAGA	GGCTGGAGCT	ATGCATGCAC	300
AGTGCTTTCT	CCCAACCTTG	CTTCTGAGAA	AAGTGTCCTT	GCGAGGGCCC	TGGAGGAGGG	360
AGCTAGGGAC	CAGCAGAAGG	GCCTAGGTTT	CTGTAGCATC	ATTTTGTAGC	CTGGCTGAAT	420
CTGGGAAGCA	CCTGGTGGCT	TTAACATTCC	CGTTAGCTCG	AG		462

(2) INFORMATION FOR SEQ ID NO:1508:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 694 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1508:

GAATTCGGCC	TTCATGGCCT	AGTCACAATC	CACTTAAAGA	AGTTTGTTTA	TATTTAGTG	60
AAAATTTTCT	TCCAGAGTAG	GTTTTTTTTC	GTGGGTTGGG	GGGTAACTTT	ACTACAATTA	120
GTAAGTATGG	TGCAGAATTT	CATGCAAATG	AGGAGTGCCA	GCAGTGTGAT	AATTTAAACA	180
TATTTAAACA	AAAACAAAAA	AAATGAATGC	ACAAACTTGC	TGCTGCTTAG	ATCACTGCAG	240
CTTCTAGGAC	CCGGTTTCTT	TTACTGATTT	AAAAACAAAA	CAAAAAAA	TAAAAAGTT	300
GTGCCTGAAA	TGAATCTTGT	TTTTTTTTAT	AAGTAGCCGC	CTGGTTACTG	TGTCCTGTAA	360
AATACAGACA	CTTGACCCCT	GGTGTAGCTT	CTGTTCAACT	TTATATCACG	GGAATGGATG	420
GGTCTGATTT	CTTGGCCCTC	TTCTTGAATT	GGCCATATAC	AGGGTCCCTG	GCCAGTGGAC	480
TGAAGGCTTT	GTCTAAGATG	ACAAGGGTCA	GCTCAGGGGA	TGTGGGGGAG	GGCGGTTTAA	540
TCTTCCCCCT	TGTCGTTTGA	GGTTTGTATC	TCTGGGTAAA	GAGGCCGTTT	ATCTTTGTAA	600
ACACGAAACA	TTTTTGCTTT	CTCAAGTTTT	CTGTTAATGG	CGAAAGAATG	GAAGCGAATA	660
AAGTTTTACT	GATTTTGTAG	ACACTAGACT	CGAG			694

(2) INFORMATION FOR SEQ ID NO:1509:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 490 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1509:

```

GAATTCGGCC TTCATGGCCT AATGAGGTTT TATCTAGAGG TGATGGGAGA CAGTGACAGA      60
TCATCAGGCA TTAGATTCTC ATAAGGACTG CGCAACCTAG ATCCCTTGAA TGAACAGTTC      120
ACAATAGGGT TCACTCTCCA ATGAGAATCT AATGCTGCCG CTGATCTGAC AGGTGCCAGA      180
GCTCAGGCGG TAATACGAGA GGCTGGAGAT ACAGATAAAG CTTCACTTGC TTGCCCCGCA      240
CTTACCTCCT CTTGTGCGGC CCAGTTTCTA ACAGGCCACA GACCGCTACC AGTCCATGGC      300
CTGGAAGTTG GGGACCCCTC TACTGGGATA TTTATAATTG CATATGTGGT TACCTAATAT      360
TTCCATGATA CAACACTGGT CTAGATTCTA GGCCATTCTC CTTCAAAAAG AACCTGTCTT      420
CCTTACAGTT TTACTGTTTA GCAGCAATGT TTTCTACCCC TTCTTAAAT TTTAGCCAC      480
CACACTCGAG                                     490
  
```

(2) INFORMATION FOR SEQ ID NO:1510:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 313 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1510:

```

GAATTCGGCC TTCATGGCCT ACTCTCTCAT TCCTACCCCTC CTCCCTCCA CTCAGCTCC      60
TCCCAATCCC CAAGGTCCTC TCATTCCCAC CTTCTCCCTC TCCTCTCCTC ACGCTCCTCC      120
CTATCCCCGA GTCCTCTCT CATCCCTACC CTCCTCCCCT CCACTCACGC TCCTCCCAAT      180
CCCCAAGGTC CTCTCATTC CACCTTCCTC CTTCTCTCTC CTCAGCTCC TCCCTATCCC      240
CGAGCTCCTC TCTCACTCCC TCCCTCCTCT CATGCTCCTC CCCCCTCTCC TCATGCTCCT      300
CCCCATCCTC GAG                                     313
  
```

(2) INFORMATION FOR SEQ ID NO:1511:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 354 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1511:

```

GCCGGGTGGG CCGGAGGTGG CGCGGCCGCA CGGCTTTGTT CCGGAAAGCC CTTAGGTGGA      60
GAGCGATGTG GGGCGCGGCA GGGGATCGC GTAGAGGAAC CTTGCGCAC CGCCTCTCCG      120
GGTCTGGGAA TCTGCTGAAC TCCTTGCCTC TCTTGGGTC CCTCGAACGC CCCAGCTAAG      180
AAGGGCGGGG GCCTTGCCAG GGCGCGAGCA ACATGACGTT CAAGGTCTTC CTGTGGCTTC      240
TGTAAGAAA TGTTACGTG GGAGCCTGTC CACATGGGCT GTACTAAGGA TCTGGCACGA      300
GGAAGAAATA TCACTGCAGA ACCTGAAGCC CTCCGTTGGA AGGGTCACCT CGAG      354
  
```

(2) INFORMATION FOR SEQ ID NO:1512:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 407 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1512:

```

GAATTCGGCC AAAGAGGCCT AGAGCAGCTT GGCTAAAAGT AAGGGTGTCG TGCTGATGGC      60
CCTGTGCGCA CTGACCCGCG CTCTGCGCTC TCTGAACCTG GCGCCCCCGA CCGTCGCCGC      120
CCCTGCCCCG AGTCTGTTCC CGCCCGCCCA GATGATGAAC AATGGCCTCC TCCAACAGCC      180
CTCTGCCTTG ATGTTGCTCC CCTGCCGCC AGTTCTTACT TCTGTGGCCC TTAATGCCAA      240
CTTTGTGTCC TGAAGAGTC GTACCAAGTA CACCATTACA CCAGTGAAGA TGAGGAAGTC      300
TGGGGGCCGA GACCACACAG GTGGGAACAA GGACAGGGG ATTTAAGCAG TCAAAGGAA      360
AAACATGTTA AGACCCTAGA CTTGTATATT GACACACAGA ACTCGAG      407

```

(2) INFORMATION FOR SEQ ID NO:1513:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 422 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1513:

```

GAATTCGGCC AAAGAGGCCT ACATTCATAC AATTACAGAA TTCAAATATT GCAAAGGAT      60
GTGTGTCTTT CTCCCGAGC TCCCCTGTTT CCCTTCATTG AAAACCACCA CGGTGCCATC      120
TCTTGTGTAT GCAGGGCTAT GCACCTGCAG GCACGTGTGT ATGCACTCCC CGCTTGTGTT      180
TACACAAGCT GTGGGGTGTT ACGCATGCCT GCCTTTTTC CTTAATAATA CAGCTTGAG      240
AGATTTTGT ATCATTAT AAATCCCACT CGCTCTTTT GATGGCCACA TAATACTAC      300
TGCATAATAT GGATAGCCT TATTGATTT AACTAGTTCC CTAATGATGG ACTTTTAAGT      360
TGTTTCCTTT TTTTCTTT TTTGCTACTG CAAACGATGC TATCTAGGCC TCTTTGCCCG      420
AA

```

(2) INFORMATION FOR SEQ ID NO:1514:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 485 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1514:

```

GAATTCGGCC AAAGAGGCCT ATGGAAATTC AAGACCTGAT GTTTGAGGAG ATGAGGGAAA      60
CTCTTAAAAA TGACCTAAAA GCAGTTTTAG GAGGAAAAGC TACAATACCT GAGGTAAAGA      120
ATTCAGAGAA CTCCAGTAGT AGGACAGAGT TTCAGCAAAT AATCAATTTA GCATTACAAA      180
AAACAGGGAT GGTAGGGAAA ATAGAAGGAG AAAACTCTAA AATAGGTGAT GATAATGAAA      240
ATTTAACCTT TAAATTAGAA GTAAATGAGC TGAGTGGTAA ATTAGACAAC ACTAACGAAT      300
ACAATAGTAA TGATGGTAAG AAATTACCCC AGGGTGAATC ACGAAGTTAC GAAGTCATGG      360
GAAGTATGGA AGAAACCTTA TGCAATATAG ATGACAGAGA TGGAAATCGC AATGTCCATT      420
TAGAATTTAC AGAAAGAGAG AGTAGGAAGG ATGGAGAGGA TGAATTTGTC AAAGAAAAAC      480

```

TCGAG

485

(2) INFORMATION FOR SEQ ID NO:1515:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 400 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1515:

GAATTCGGCC AAAGAGGCCT AGGCACAGAA GGGTGGTGAG TGTGATCAAA TCTAGTCTCA	60
CTCCCACTTT TTAGTCTCAC TCCTACTTTT GTCCACCACC CAGGCACGGA GAGAAAGGAA	120
TGTTTAGCAC AAGACACAGC GGAGCTCGGG ATTGGCTAAA CTCCCATAGT ATTTATGGTG	180
GCCGCCGGCG GGGGCCCCAG CCCAGCTTGC AGGCCACCTC TAGCTTTCTT CCTACCCCAT	240
TCCCGGCTTC CCTCCTCCTC CCCTGCAGCC TGGTTAGGTG GATACCTGCC CTGACATGTG	300
AGGCAAGCTA AGGCCTGGAG GGTGAGATGG GAGACCAGGT CCCAAGGGAG CAAGACCTCG	360
CGAAGCGCAG CAGCCCCGGC CCTAGGCCTC TTTGGCCGAA	400

(2) INFORMATION FOR SEQ ID NO:1516:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 145 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1516:

GAATTCGCGG CCGCGTCGAC GTCGACGCGG CCGCGAATTC GGCCAAAGAG GCCTACCCAT	60
GTCAATCAAG ATGGGTGATT ATGAAATGCC AGACTTCTAA AATAAATGTT TTGGAATTCA	120
ATGGGTAAAT AAATGCTGGC TCGAG	145

(2) INFORMATION FOR SEQ ID NO:1517:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 277 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1517:

GCTGGACCTC CTGTGCAAGA ACATGAAACA GCTGTGGTTC TTCCTTCTCC TGGTGGCAGC	60
TCCAGATCG GTTCTGTCCC AGGTGCAGCT GCGGGAGTCG GGCCAGGAC TGGTGAAGCC	120
TTCGGAGACC CTGTCCCTCA CCTGCACTGT CTCTGGTACT TCCGTGAGAA GTGTTAGTTA	180
CGACTGGAGT TGGCTCCGGC AGTCCCCGGG GAAGGACTG GAGTGGCTTG GAGAGATTGA	240
TTACAGGGGG AGAGGCAATT ACAACCCGTC CCTCGAG	277

(2) INFORMATION FOR SEQ ID NO:1518:

- (i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 161 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1518:

GAATTCGGCC AAAGAGGCCT ACTCATGCAC CTAATTGGAT CCTATCTTTG TGTGTGTTAGC	60
TGGTTATTAT GCAGACTTTA TTATGTGGTT GTTTTATAGT GTCCATAACC TATGTACTTA	120
AGTTTGTGTTT TGTGGTGGCG CTTCCAATTA GGGCTCTCGA G	161

(2) INFORMATION FOR SEQ ID NO:1519:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 561 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1519:

GAATTCGGCC TTCATGGCCT AATATAAAAC AATGTTTTTC AAGGCATTAT ATAATAGGCT	60
AAGGACAGTG ACCTCCAAGA GACAGCAAAC AAGGTAATAC CTGTGACTGC TCCAGCTTAC	120
TGCCTTGAGA GAATTAATAG TAGGTTTGTG GTACAGGGAG GGAGLATCCA GTCAGAGCCC	180
AGCGGACTTG CTGAATTAAG GAAATGGAGC TGAGAGTCCA GAGAGACCAA CATGGCTAAA	240
GTTGTCATGA CAGAGCACTC AGAACTAGAG AGCTGCACAG CAACATAACC TAAGAGCTCT	300
GAAGATAATC TCCCTCAAAT ACTCAGCTGA GTACTGATCA ACATATATGT GTGAGGAAGC	360
TATCTGAGGC TGACAAAGAA CTGCCTGAAG AGATTAGAGG GAACAGTACT TGGCACTCAC	420
ACAGAATTGG AAAGTGTACC TGTTCACCACC AGCCAAACTG GAAAAACCTC AGGATTTCATG	480
GGGTACTCAG AAAGGACTTG CATCAGGTAT GGGGAATAAT TAGCCCTAGA CAGAGCACTG	540
CTCTAATCCC ATCCACTCGA G	561

What is claimed is:

1. An isolated polynucleotide comprising a nucleotide sequence selected from the group consisting of:

SEQ ID NO:1, SEQ ID NO:2, SEQ ID NO:3, SEQ ID NO:4, SEQ ID NO:5, SEQ ID NO:6, SEQ ID NO:7, SEQ ID NO:8, SEQ ID NO:9, SEQ ID NO:10, SEQ ID NO:11, SEQ ID NO:12, SEQ ID NO:13, SEQ ID NO:14, SEQ ID NO:15, SEQ ID NO:16, SEQ ID NO:17, SEQ ID NO:18, SEQ ID NO:19, SEQ ID NO:20, SEQ ID NO:21, SEQ ID NO:22, SEQ ID NO:23, SEQ ID NO:24, SEQ ID NO:25, SEQ ID NO:26, SEQ ID NO:27, SEQ ID NO:28, SEQ ID NO:29, SEQ ID NO:30, SEQ ID NO:31, SEQ ID NO:32, SEQ ID NO:33, SEQ ID NO:34, SEQ ID NO:35, SEQ ID NO:36, SEQ ID NO:37, SEQ ID NO:38, SEQ ID NO:39, SEQ ID NO:40, SEQ ID NO:41, SEQ ID NO:42, SEQ ID NO:43, SEQ ID NO:44, SEQ ID NO:45, SEQ ID NO:46, SEQ ID NO:47, SEQ ID NO:48, SEQ ID NO:49, SEQ ID NO:50, SEQ ID NO:51, SEQ ID NO:52, SEQ ID NO:53, SEQ ID NO:54, SEQ ID NO:55, SEQ ID NO:56, SEQ ID NO:57, SEQ ID NO:58, SEQ ID NO:59, SEQ ID NO:60, SEQ ID NO:61, SEQ ID NO:62, SEQ ID NO:63, SEQ ID NO:64, SEQ ID NO:65, SEQ ID NO:66, SEQ ID NO:67, SEQ ID NO:68, SEQ ID NO:69, SEQ ID NO:70, SEQ ID NO:71, SEQ ID NO:72, SEQ ID NO:73, SEQ ID NO:74, SEQ ID NO:75, SEQ ID NO:76, SEQ ID NO:77, SEQ ID NO:78, SEQ ID NO:79, SEQ ID NO:80, SEQ ID NO:81, SEQ ID NO:82, SEQ ID NO:83, SEQ ID NO:84, SEQ ID NO:85, SEQ ID NO:86, SEQ ID NO:87, SEQ ID NO:88, SEQ ID NO:89, SEQ ID NO:90, SEQ ID NO:91, SEQ ID NO:92, SEQ ID NO:93, SEQ ID NO:94, SEQ ID NO:95, SEQ ID NO:96, SEQ ID NO:97, SEQ ID NO:98, SEQ ID NO:99, SEQ ID NO:100, SEQ ID NO:101, SEQ ID NO:102, SEQ ID NO:103, SEQ ID NO:104, SEQ ID NO:105, SEQ ID NO:106, SEQ ID NO:107, SEQ ID NO:108, SEQ ID NO:109, SEQ ID NO:110, SEQ ID NO:111, SEQ ID NO:112, SEQ ID NO:113, SEQ ID NO:114, SEQ ID NO:115, SEQ ID NO:116, SEQ ID NO:117, SEQ ID NO:118, SEQ ID NO:119, SEQ ID NO:120, SEQ ID NO:121, SEQ ID NO:122, SEQ ID NO:123, SEQ ID NO:124, SEQ ID NO:125, SEQ ID NO:126, SEQ ID NO:127, SEQ ID NO:128, SEQ ID NO:129, SEQ ID NO:130, SEQ ID NO:131, SEQ ID NO:132, SEQ ID NO:133, SEQ ID NO:134, SEQ ID NO:135, SEQ ID NO:136, SEQ ID NO:137, SEQ ID NO:138, SEQ ID NO:139, SEQ ID NO:140, SEQ ID NO:141, SEQ ID NO:142, SEQ ID NO:143, SEQ ID NO:144, SEQ ID NO:145,

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or a complement of said sequence.

2. An isolated polynucleotide consisting of a nucleotide sequence selected from the group consisting of:

SEQ ID NO:1, SEQ ID NO:2, SEQ ID NO:3, SEQ ID NO:4, SEQ ID NO:5, SEQ ID NO:6, SEQ ID NO:7, SEQ ID NO:8, SEQ ID NO:9, SEQ ID NO:10, SEQ ID NO:11, SEQ ID NO:12, SEQ ID NO:13, SEQ ID NO:14, SEQ ID NO:15, SEQ ID NO:16, SEQ ID NO:17, SEQ ID NO:18, SEQ ID NO:19, SEQ ID NO:20, SEQ ID NO:21, SEQ ID NO:22, SEQ ID NO:23, SEQ ID NO:24, SEQ ID NO:25, SEQ ID NO:26, SEQ ID NO:27, SEQ ID NO:28, SEQ ID NO:29, SEQ ID NO:30, SEQ ID NO:31, SEQ ID NO:32, SEQ ID NO:33, SEQ ID NO:34, SEQ ID NO:35, SEQ ID NO:36, SEQ ID NO:37, SEQ ID NO:38, SEQ ID NO:39, SEQ ID NO:40, SEQ ID NO:41, SEQ ID NO:42, SEQ ID NO:43, SEQ ID NO:44, SEQ ID NO:45, SEQ ID NO:46, SEQ ID NO:47, SEQ ID NO:48, SEQ ID NO:49, SEQ ID NO:50, SEQ ID NO:51, SEQ ID NO:52, SEQ ID NO:53, SEQ ID NO:54, SEQ ID NO:55, SEQ ID NO:56, SEQ ID NO:57, SEQ ID NO:58, SEQ ID NO:59, SEQ ID NO:60, SEQ ID NO:61, SEQ ID NO:62, SEQ ID NO:63, SEQ ID NO:64, SEQ ID NO:65, SEQ ID NO:66, SEQ ID NO:67, SEQ ID NO:68, SEQ ID NO:69, SEQ ID NO:70, SEQ ID NO:71, SEQ ID NO:72, SEQ ID NO:73, SEQ ID NO:74, SEQ ID NO:75, SEQ ID NO:76, SEQ ID NO:77, SEQ ID NO:78, SEQ ID NO:79, SEQ ID NO:80, SEQ

ID NO:81, SEQ ID NO:82, SEQ ID NO:83, SEQ ID NO:84, SEQ ID NO:85, SEQ ID NO:86, SEQ ID NO:87, SEQ ID NO:88, SEQ ID NO:89, SEQ ID NO:90, SEQ ID NO:91, SEQ ID NO:92, SEQ ID NO:93, SEQ ID NO:94, SEQ ID NO:95, SEQ ID NO:96, SEQ ID NO:97, SEQ ID NO:98, SEQ ID NO:99, SEQ ID NO:100, SEQ ID NO:101, SEQ ID NO:102, SEQ ID NO:103, SEQ ID NO:104, SEQ ID NO:105, SEQ ID NO:106, SEQ ID NO:107, SEQ ID NO:108, SEQ ID NO:109, SEQ ID NO:110, SEQ ID NO:111, SEQ ID NO:112, SEQ ID NO:113, SEQ ID NO:114, SEQ ID NO:115, SEQ ID NO:116, SEQ ID NO:117, SEQ ID NO:118, SEQ ID NO:119, SEQ ID NO:120, SEQ ID NO:121, SEQ ID NO:122, SEQ ID NO:123, SEQ ID NO:124, SEQ ID NO:125, SEQ ID NO:126, SEQ ID NO:127, SEQ ID NO:128, SEQ ID NO:129, SEQ ID NO:130, SEQ ID NO:131, SEQ ID NO:132, SEQ ID NO:133, SEQ ID NO:134, SEQ ID NO:135, SEQ ID NO:136, SEQ ID NO:137, SEQ ID NO:138, SEQ ID NO:139, SEQ ID NO:140, SEQ ID NO:141, SEQ ID NO:142, SEQ ID NO:143, SEQ ID NO:144, SEQ ID NO:145, SEQ ID NO:146, SEQ ID NO:147, SEQ ID NO:148, SEQ ID NO:149, SEQ ID NO:150, SEQ ID NO:151, SEQ ID NO:152, SEQ ID NO:153, SEQ ID NO:154, SEQ ID NO:155, SEQ ID NO:156, SEQ ID NO:157, SEQ ID NO:158, SEQ ID NO:159, SEQ ID NO:160, SEQ ID NO:161, SEQ ID NO:162, SEQ ID NO:163, SEQ ID NO:164, SEQ ID NO:165, SEQ ID NO:166, SEQ ID NO:167, SEQ ID NO:168, SEQ ID NO:169, SEQ ID NO:170, SEQ ID NO:171, SEQ ID NO:172, SEQ ID NO:173, SEQ ID NO:174, SEQ ID NO:175, SEQ ID NO:176, SEQ ID NO:177, SEQ ID NO:178, SEQ ID NO:179, SEQ ID NO:180, SEQ ID NO:181, SEQ ID NO:182, SEQ ID NO:183, SEQ ID NO:184, SEQ ID NO:185, SEQ ID NO:186, SEQ ID NO:187, SEQ ID NO:188, SEQ ID NO:189, SEQ ID NO:190, SEQ ID NO:191, SEQ ID NO:192, SEQ ID NO:193, SEQ ID NO:194, SEQ ID NO:195, SEQ ID NO:196, SEQ ID NO:197, SEQ ID NO:198, SEQ ID NO:199, SEQ ID NO:200, SEQ ID NO:201, SEQ ID NO:202, SEQ ID NO:203, SEQ ID NO:204, SEQ ID NO:205, SEQ ID NO:206, SEQ ID NO:207, SEQ ID NO:208, SEQ ID NO:209, SEQ ID NO:210, SEQ ID NO:211, SEQ ID NO:212, SEQ ID NO:213, SEQ ID NO:214, SEQ ID NO:215, SEQ ID NO:216, SEQ ID NO:217, SEQ ID NO:218, SEQ ID NO:219, SEQ ID NO:220, SEQ ID NO:221, SEQ ID NO:222, SEQ ID NO:223, SEQ ID NO:224, SEQ ID NO:225, SEQ ID NO:226, SEQ ID NO:227, SEQ ID NO:228, SEQ ID NO:229, SEQ ID NO:230, SEQ ID NO:231, SEQ ID NO:232, SEQ ID NO:233, SEQ ID NO:234, SEQ ID NO:235,

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or a complement of said sequence.

3. An isolated polynucleotide consisting essentially of a nucleotide sequence selected from the group consisting of:

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or a complement of said sequence.

4. An isolated polynucleotide comprising a nucleotide sequence which hybridizes to a sequence selected from the group consisting of:

SEQ ID NO:1, SEQ ID NO:2, SEQ ID NO:3, SEQ ID NO:4, SEQ ID NO:5, SEQ ID NO:6, SEQ ID NO:7, SEQ ID NO:8, SEQ ID NO:9, SEQ ID NO:10, SEQ ID NO:11, SEQ ID NO:12, SEQ ID NO:13, SEQ ID NO:14, SEQ ID NO:15, SEQ ID NO:16, SEQ ID NO:17, SEQ ID NO:18, SEQ ID NO:19, SEQ ID NO:20, SEQ ID NO:21, SEQ ID NO:22, SEQ ID NO:23, SEQ ID NO:24, SEQ ID NO:25, SEQ ID NO:26, SEQ ID NO:27, SEQ ID NO:28, SEQ ID NO:29, SEQ ID NO:30, SEQ ID NO:31, SEQ ID NO:32, SEQ ID NO:33, SEQ ID NO:34, SEQ ID NO:35, SEQ ID NO:36, SEQ ID NO:37, SEQ ID NO:38, SEQ ID NO:39, SEQ ID NO:40, SEQ ID NO:41, SEQ ID NO:42, SEQ ID NO:43, SEQ ID NO:44, SEQ ID NO:45, SEQ ID NO:46, SEQ ID NO:47, SEQ ID NO:48, SEQ ID NO:49, SEQ ID NO:50, SEQ ID NO:51, SEQ ID NO:52, SEQ ID NO:53, SEQ ID NO:54, SEQ ID NO:55, SEQ ID NO:56, SEQ ID NO:57, SEQ ID NO:58, SEQ ID NO:59, SEQ ID NO:60, SEQ ID NO:61, SEQ ID NO:62, SEQ ID NO:63, SEQ ID NO:64, SEQ ID NO:65, SEQ ID NO:66, SEQ ID NO:67, SEQ ID NO:68, SEQ ID NO:69, SEQ ID NO:70, SEQ ID NO:71, SEQ ID NO:72, SEQ ID NO:73, SEQ ID NO:74, SEQ ID NO:75, SEQ ID NO:76, SEQ ID NO:77, SEQ ID NO:78, SEQ ID NO:79, SEQ ID NO:80, SEQ ID NO:81, SEQ ID NO:82, SEQ ID NO:83, SEQ ID NO:84, SEQ ID NO:85, SEQ ID NO:86, SEQ ID NO:87, SEQ ID NO:88, SEQ ID NO:89, SEQ ID NO:90, SEQ ID NO:91, SEQ ID NO:92, SEQ ID NO:93, SEQ ID NO:94, SEQ ID NO:95, SEQ ID NO:96, SEQ ID NO:97, SEQ ID NO:98, SEQ ID NO:99, SEQ ID NO:100, SEQ ID NO:101, SEQ ID NO:102, SEQ ID NO:103, SEQ ID NO:104, SEQ ID NO:105, SEQ ID NO:106, SEQ ID NO:107, SEQ ID NO:108, SEQ ID NO:109,

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or to a complement of said sequence.

5. An isolated protein encoded by an isolated polynucleotide of claim 1.
6. An isolated protein encoded by an isolated polynucleotide of claim 2.
7. An isolated protein encoded by an isolated polynucleotide of claim 3.
8. An isolated protein encoded by an isolated polynucleotide of claim 4.

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